

# THE SMD CODEBOOK

## SMD Codes.

SMD devices are, by their very nature, too small to carry conventional semiconductor type numbers. Instead, a somewhat arbitrary coding system has grown up, where the device package carries a simple two- or three-character ID code. Identifying the manufacturers' type number of an SMD device from the package code can be a difficult task, involving combing through many different databooks.

This HTML book is designed to provide an easy means of device identification. It lists well over 3,400 device codes in alphabetical order, together with type numbers, device characteristics or equivalents and pinout information.

### How to use the SMD Codebook

To identify a particular SMD device, first identify the package style and note the ID code printed on the device. Now look up the code in the alphanumeric listing which forms the main part of this book by clicking on the first character shown in the left-menu.

Unfortunately, each device code is not necessarily unique. For example a device coded **1A** might be either a **BC846A** or a **FMMT3904**. Even the same manufacturer may use the same code for different devices!

If there is more than one entry, use the package style to differentiate between devices with the same ID code.

This compilation has been collected from R P Blackwell G4PMK, manufacturers' data and other sources of SMD device ID codes, pinout and leaded device equivalent information.

The entries under the Manufacturer column are not intended to be comprehensive; rather they are intended to provide help on locating sources of more detailed information if you require it.

### ID Code Variations

Many manufacturers use an extra letter as their own identification code. If the device is from Philips it will sometimes have a lower case 'p' (or sometimes 't') added to the code; Siemens devices usually have a lower case 's'.

For example, if the code is **1A**, according to the table there are a number of possibilities:

- 1A BC846A Phi ITT N BC546A
- 1A FMMT3904 Zet N 2N3904
- 1A MMBT3904 Mot N 2N3904
- 1A IRLML2402 IR F n-ch mosfet 20V 0.9A

**This has been a problem in the past, however recently manufacturers have been adding lower case letters which clarify the code.**

Many recent Motorola devices have a small superscript letter after the device code, such as **SA<sup>c</sup>**. (This smaller letter is merely a month of manufacture code.)

Many devices from Rohm Semiconductors which start with **G** have direct equivalents found in the rest of the number. For example **GD1** is the same as **D1** which is a BCW31.

Some devices have a single coloured letter (usually on extremely small diode packages). Colour, if significant, is shown in small type after the code letter.

An 'L' suffix usually indicates a low-profile package, such as an SOT323 or SC70.

**SOT323.**

**SC70.**

Reverse joggle devices do present a few problems. They often have an 'R' in the type number. A reverse package is one where the lead have been bent up instead of down. So it's a mirror image of a conventional device. Identification is usually possible from the code number, but some manufacturers use the same code. In these cases, it's a case of looking at the device with a magnifying glass. The leads of most normal packages come out closer to the circuit board side of the device; conversely a reverse joggle package will have them coming out closer to the 'top' of the device.

Sometimes a series of devices, derived from the same die, have related type (not code) numbers. Often an 'R' will indicate a reverse joggle package, and/or a 'W' indicate a smaller package variant, such as SOT343.

Sometimes similarities are also found in the code numbers. For example:

Recently some manufacturers have used a symbol or lower case letter to indicate the country of manufacture. These have been ignored in the alphabetical ordering. For example:

- '67' is the code for a BFP67 (SOT143 package) ,
- '67R' is the code for the reverse joggle variant BFP67R (SOT143R),
- 'W67' is the code for a SOT343 package version.

SOT143.

'Z-S' and 'ZtS ' are both 2PC4081Q devices made by Philips; the first made in Hong Kong and the second in Malaysia; this appears in the codebook classified under **ZS**.

#### **Leaded equivalent device and information**

Where possible, the listing gives the part number of a conventional wire-leaded device with equivalent characteristics. If the leaded device is well-known then no more information is given. If the device is less common, some additional information will sometimes be given. Where no exact leaded equivalent exists, a brief device description is given, which may be sufficient to allow substitution with another device.

When describing device characteristics, some terms are implied from the type of device. For example, a voltage specified for a rectifier diode is usually the maximum PIV (peak inverse voltage) of the diode, but for a zener diode the operating (zener voltage) will be given.

Normally, where a voltage, current or power is specified, these will be limiting values. For example, a device specified as NPN 20V 0.1A 1W is a NPN transistor with a  $V_{ce}$  (max) of 20V, maximum collector current of 100mA and a maximum total power dissipation of 1W. Some of the transistors are types with integrated resistors; in the list, a base resistor means a resistor connected in series with the base. When two resistor values are given, the first is the series base resistor, and the second the resistor between base and emitter.

#### **Digital Transistors (dtr)**

These are transistors with built-in resistors.

Some have one resistor between base and emitter, others in series with the base. Many others have both.

To keep things simple, the series resistor is called R1 and the base emitter resistor is called R2. If both are present, then two values are given, R1 first. So 4k7 + 10k means that R1 (the base resistor) is 4k7 and R2 (the resistor between base and emitter) is 10k.

#### **Conclusion**

Identifying the manufacturers' type number of an SMD device from the package code can be a difficult task, involving combing through many different databooks. This HTML book is designed to provide an easy means of device identification.

## **Abbreviations**

**amp** amplifier  
**atten** attenuator  
**a** anode  
**b** base  
**c** cathode  
**ca** common anode  
**cc** common cathode  
**comp** complement  
**d** drain  
**dg** dual gate  
**dtr** digital transistor (see codebook introduction)  
**enh** enhancement (mode - FETs)  
**fet** field effect transistor  
**fT** transition frequency  
**GaAsfet** Gallium Arsenide field effect transistor  
**g** gate  
**gnd** ground  
**gp** general purpose  
**hfe** small signal current gain  
**i/p** input  
**Id** drain current  
**Ig** gate current  
**Ir** reverse leakage current (diodes)  
**jfet** junction field effect transistor  
**MAG** maximum available gain  
**max** maximum  
**min** minimum  
**mmic** microwave miniature integrated circuit  
**modamp** modular amplifier - an mmic amplifier  
**mosfet** metal oxide insulated gate fet  
**n-ch** n-channel fet (any type)

**npn** npn bipolar transistor  
**o/p** output  
**p-ch** p-channel fet (any type)  
**pin** pin diode  
**pkg** package  
**pnP** pnp bipolar transistor  
**prot** protection, protected (as in mosfet gate)  
**res** resistor  
**s** source  
**ser** series  
**Si** silicon  
**substr** substrate  
**sw** switch or switching  
**Vce** collector - emitter voltage (maximum)  
**Vcc** collector supply voltage  
**Manufacturer abbreviations**  
**Agi** Agilent (was HP)  
**Fch** Fairchild  
**HP** Hewlett-Packard (Now Agilent)  
**Inf** Infineon (was Siemens)  
**ITT** ITT Semiconductors  
**MC** Mini-Circuits  
**Mot** Motorola (now ON Semiconductors)  
**Nat** National Semiconductor  
**Nec** NEC  
**NJRC** New Japan Radio Co  
**ON** ON Semiconductors (was Motorola)  
**Phi** Philips  
**Roh** Rohm  
**SGS** SGS-Thompson  
**Sie** Siemens (now Infineon)  
**Sil** Siliconix (Vishay-Siliconix)  
**Tem** Temic Semiconductors  
**Tfk** Telefunken (Vishay-Telefunken)  
**Tok** Toko Inc.  
**Zet** Zetex

## Codes beginning with '0'

### Code Device Manufacturer Base Package Leaded Equivalent/Data

**0** 2SC3603 Nec CX SOT173 Npn RF fT 7GHz  
**005** SSTPAD5 Sil J - PAD-5 5pA leakage diode  
**p01** PDTA143ET Phi N SOT23 pnp dtr 4k7+4k7  
**t01** PDTA143ET Phi N SOT23 pnp dtr 4k7+4k7  
**01** Gali-1 MC AZ SOT89 DC-8GHz MMIC amp 12dB gain  
**010** SSTPAD10 Sil J - PAD-10 10pA leakage diode  
**011** SO2369R SGS R SOT23R 2N2369  
**02** BST82 Phi M - n-ch mosfet 80V 175mA  
**02** MRF571 1L Mot X SOT143 npn RF MRF571  
**02** DTCC114T Roh N - 50V 100mA npn sw + 10k base res  
**02** Gali-2 MC AZ SOT89 DC-8GHz MMIC amp 16dB gain  
**p02** PDTC143ET Phi N SOT23 npn 4k7+4k7 bias res  
**t02** PDTC143ET Phi N SOT23 npn 4k7+4k7 bias res  
**03** Gali-3 MC AZ SOT89 DC-3GHz MMIC amp 22dB gain  
**03** DTC143TE Roh N EMT3 npn dtr R1 4k7 50V 100mA  
**03** DTC143TUA Roh N SC70 npn dtr R1 4k7 50V 100mA  
**03** DTC143TKA Roh N SC59 npn dtr R1 4k7 50V 100mA  
**04** DTC114TCA Roh N SOT23 npn dtr R1 10k 50V 100mA  
**04** DTC114TE Roh N EMT3 npn dtr R1 10k 50V 100mA  
**04** DTC114TUA Roh N SC70 npn dtr R1 10k 50V 100mA  
**04** DTC114TKA Roh N SC59 npn dtr R1 10k 50V 100mA  
**04** MRF521 1L Mot X SOT143 pnp RF MRF521  
**04** Gali-4 MC AZ SOT89 DC-4GHz MMIC amp 17.5 dBm  
**-04** PMSS3904 Phi N SOT323 2N3904  
**t04** PMBS3904 Phi N SOT23 2N3904  
**05** Gali-4 MC AZ SOT89 DC-4GHz MMIC amp 18 dBm o/p  
**05** DTC124TE Roh N EMT3 npn dtr R1 22k 50V 100mA  
**05** DTC124TUA Roh N SC70 npn dtr R1 22k 50V 100mA  
**05** DTC124TKA Roh N SC59 npn dtr R1 22k 50V 100mA  
**05F** TSDF1205R Tfk WQ - fT12GHz npn 4V 5mA  
**06** Gali-6 MC AZ SOT89 DC-4GHz MMIC amp 115 dBm o/p  
**06** DTC144TE Roh N EMT3 npn dtr R1 47k 50V 100mA

**06** DTC144TUA Roh N SC70 npn dtr R1 47k 50V 100mA  
**06** DTC144TKA Roh N SC59 npn dtr R1 47k 50V 100mA  
**-06** PMSS3906 Phi N SOT323 2N3906  
**t06** PMBS3906 Phi N SOT23 2N3906  
**020** SSTPAD20 Sil J - PAD-20 20pA leakage diode  
**050** SSTPAD50 Sil J - PAD-50 50pA leakage diode  
**081** SO2369AR SGS R SOT23R 2N2369A  
**09** DTC115TUA Roh N SC70 npn dtr R2 100k 50V 100mA  
**09** DTC115TKA Roh N SC59 npn dtr R2 100k 50V 100mA  
**0A** MUN5111DW1 Mot DO SOT363 dual pnp dtr 10k+10k  
**0A** DTC125TUA Roh N SC70 npn dtr R2 100k 50V 100mA  
**0A** DTC125TKA Roh N SC59 npn dtr R2 100k 50V 100mA  
**0B** MUN5112DW1 Mot DO SOT363 dual pnp dtr 22k+22k  
**0C** MUN5113DW1 Mot DO SOT363 dual pnp dtr 47k+47k  
**0D** MUN5114DW1 Mot DO SOT363 dual pnp dtr 10k+47k  
**0E** MUN5115DW1 Mot DO SOT363 dual pnp dtr R1 10k  
**0F** MUN5116DW1 Mot DO SOT363 dual pnp dtr R1 4k7  
**0G** MUN5130DW1 Mot DO SOT363 dual pnp dtr 1k0+1k0  
**0H** MUN5131DW1 Mot DO SOT363 dual pnp dtr 2k2+2k2  
**0J** MUN5132DW1 Mot DO SOT363 dual pnp dtr 4k7+4k7  
**0K** MUN5133DW1 Mot DO SOT363 dual pnp dtr 4k7+47k  
**0L** MUN5134DW1 Mot DO SOT363 dual pnp dtr 22k+47k  
**0M** MUN5135DW1 Mot DO SOT363 dual pnp dtr 2k2+47k

## Codes beginning with '1'

### Code Device Manufacturer Base Package Leaded Equivalent/Data

**1** 2SC3587 Nec CX - npn RF fT10GHz  
**1** BA277 Phi I SOD523 VHF Tuner band switch diode  
**1 (red)** BB669 Sie I SOD323 56-2.7 pF varicap  
**10** MRF9411L Mot X SOT143 npn Rf 8GHz MRF941  
**10A** PZM10NB2A Phi A SOT346 dual ca 10V 0.3W zener  
**10V** PZM10NB Phi C SOT346 10V 0.3W zener  
**10Y** BZV49-C10 Phi O SOT89 10V 1W zener  
**11** MRF9511L Mot X SOT143 npn RF 8GHz MRF951  
**11** MUN5311DW1 Mot DP SOT363 npn/pnp dtr 10k+10k  
**11** PDTA114EU Phi N SOT416 pnp dtr  
**p11** PDTA114TT Phi N SOT23 pnp dtr  
**t11** PDTA114TT Phi N SOT23 pnp dtr  
**11A** PZM11NB2A Phi A SOT346 dual ca 11V 0.3W zener  
**11A** MMBD1501A Nat C SOT23 Si diode 200V 100mA  
**11V** PZM11NB Phi C SOT346 11V 0.3W zener  
**11Y** BZV49-C11 Phi O SOT89 11V 1W zener  
**12** MUN5312DW1 Mot DP SOT363 npn/pnp dtr 22k+22k  
**12** DTA123EUA Rho N SC70 pnp dtr 2k2+2k2 50V 100ma  
**12** DTA123EKA Rho N SC59 pnp dtr 2k2+2k2 res 50V 100ma  
**p12** PDTC114TT Phi N SOT23 npn dtr  
**t12** PDTC114TT Phi N SOT23 npn dtr  
**12A** MMBD1502A Nat K SOT23 Si diode 200V 100mA  
**12A** PZM12NB2A Phi A SOT346 dual ca 12V 0.3W zener  
**12E** ZC2812E Zet D SOT23 dual series RF schottky15V 20mA  
**12V** PZM12NB Phi C SOT346 12V 0.3W zener  
**12Y** BZV49-C12 Phi O SOT89 12V 1W zener  
**13** DTA143EUA Rho N SC70 pnp dtr 4k7+4k7 50V 100ma  
**13** DTA143EKA Rho N SC59 pnp dtr 4k7+4k7 50V 100ma  
**13** DTA143ECA Rho N SOT23 pnp dtr 4k7+4k7 50V 100ma  
**13t** BC846BPN Phi N SOT363 BC546B  
**13s** BAS125 Sie C SOT23 Schottky sw 24V 100mA  
**13s** BAS125W Sie C SOT323 Schottky sw 24V 100mA  
**13** MA4CS103A M/A C SOT23 Schottky RF 20V 100mA  
**13** MUN5313DW1 Mot DP SOT363 npn/pnp dtr 47k+47k  
**13A** MMBD1503A Nat D SOT23 dual Si diode 200V 100mA  
**13A** PZM13NB2A Phi A SOT346 dual ca 13V 0.3W zener  
**13E** ZC2813E Zet A SOT23 dual ca RF schottky15V 20mA  
**13V** PZM13NB Phi C SOT346 13V 0.3W zener  
**13Y** BZV49-C13 Phi O SOT89 13V 1W zener  
**14s** BAS125-04 Sie D SOT23 Dual series Schottky 25V 100mA  
**14s** BAS125-04W Sie D SOT323 Dual series Schottky 25V 100mA  
**14** BAT114-099R Sie DQ - Quad Schottky crossover ring  
**14** DTA114EUA Roh N SC70 pnp dtr 10k + 10k  
**14** DTA114EKA Roh N SC59 pnp dtr 10k + 10k  
**14** MUN5314DW1 Mot DP SOT363 npn/pnp dtr 10k R1

14 DTA114ECA Roh N SOT23 pnp dtr 10k + 10k  
14A MMBD1504A Nat B - dual cc Si diode 200V 100mA  
15s BAS125-05 Sie B SOT23 dual cc Schottky 25V 100mA  
15s BAS125-05W Sie B SOT323 dual cc Schottky 25V 100mA  
15 DTA124EUA Roh N SC70 pnp dtr 30V 50mA 22k+22k  
15 DTA124EKA Roh N SC59 pnp dtr 30V 50mA 22k+22k  
15 DTA124ECA Roh N SOT23 pnp dtr 30V 50mA 22k+22k  
15 MUN5315DW1 Mot DP SOT363 npn/pnp dtr 10k R1  
15 MMBT3960 Mot N - 2N3960  
15A MMBD1505A Nat A - dual ca Si diode 200V 100mA  
15A PZM15NB2A Phi A SOT346 dual ca 15V 0.3W zener  
15V PZM15NB Phi C SOT346 15V 0.3W zener  
15Y BZV49-C15 Phi O SOT89 15V 1W zener  
p16 PDTC114ET Phi N SOT23 npn dtr  
t16 PDTC114EU Phi N SOT323 npn dtr  
16s BAS125-06 Sie A SOT23 dual ca Schottky 25V 100mA  
16s BAS125-06W Sie A SOT323 dual ca Schottky 25V 100mA  
16 MUN5316DW1 Mot DP SOT363 npn/pnp dtr 4k7 R1  
16 DTA144EUA Roh N SC70 pnp dtr 30V 50mA 47k+47k  
16 DTA144EKA Roh N SC59 pnp dtr 30V 50mA 47k+47k  
16V PZM16NB Phi C SOT346 16V 0.3W zener  
16Y BZV49-C16 Phi O SOT89 16V 1W zener  
17s BAS125-07 Sie S SOT143 dual Schottky 25V 100mA  
17s BAS125-07W Sie S SOT343 dual Schottky 25V 100mA  
p17 PDTC124ET Phi N SOT23 npn dtr  
t17 PDTC124EU Phi N SOT323 npn dtr  
18 BFP181T Tfk X - npn Rf ft 7.8GHz 10V 20mA  
18 PDTC143ZK Phi N SOT346 npn dtr 4k7+47k  
p18 PDTC143ZT Phi N SOT23 npn dtr 4k7+47k  
t18 PDTC143ZT Phi N SOT23 npn dtr 4k7+47k  
18V PZM18NB Phi C SOT346 18V 0.3W zener  
18Y BZV49-C18 Phi O SOT89 18V 1W zener  
19 PDTA143ZK Phi N SOT346 pnp dtr 4k7+47k  
19 DTA115EUA Rho N SC70 pnp dtr 100k+100k 50V 100ma  
19 DTA115EKA Rho N SC59 pnp dtr 100k+100k 50V 100ma  
p19 PDTA143ZT Phi N SOT23 pnp dtr 4k7+47k  
t19 PDTA143ZT Phi N SOT23 pnp dtr 4k7+47k  
100 SSTPAD100 Sil J SOT23 PAD-100 100pA leakage diode  
101 PZM10NB1 Phi C SOT346 10V 0.3W zener  
102 PZM10NB2 Phi C SOT346 10V 0.3W zener  
103 PZM10NB3 Phi C SOT346 10V 0.3W zener  
111 PZM11NB1 Phi C SOT346 11V 0.3W zener  
111 DTA113ZUA Roh N SC70 pnp dtr 1k+10k 50V 100mA  
112 PZM11NB2 Phi C SOT346 11V 0.3W zener  
113 PZM11NB3 Phi C SOT346 11V 0.3W zener  
113 DTA143ZUA Roh N SC70 pnp dtr 4k7+47k 50V 100mA  
121 PZM12NB1 Phi C SOT346 12V 0.3W zener  
121 DTC113ZUA Roh N SC70 npn dtr 1k+10k 50V 100mA  
122 PZM12NB2 Phi C SOT346 12V 0.3W zener  
123 PZM12NB3 Phi C SOT346 12V 0.3W zener  
123 DTC143ZUA Roh N SC70 npn dtr 4k7+47k 50V 100mA  
131 PZM13NB1 Phi C SOT346 13V 0.3W zener  
132 PZM13NB2 Phi C SOT346 13V 0.3W zener  
132 DTA123JUA Roh N SC70 pnp dtr 2k2+47k 50V 100mA  
133 PZM13NB3 Phi C SOT346 13V 0.3W zener  
142 DTA123JUA Roh N SC70 npn dtr 2k2+47k 50V 100mA  
151 PZM15NB1 Phi C SOT346 15V 0.3W zener  
152 PZM15NB2 Phi C SOT346 15V 0.3W zener  
153 PZM15NB3 Phi C SOT346 15V 0.3W zener  
156 DTA144VUA Roh N SC70 pnp dtr 47k+10k 50V 100mA  
161 PZM16NB1 Phi C SOT346 16V 0.3W zener  
162 PZM16NB2 Phi C SOT346 16V 0.3W zener  
163 PZM16NB3 Phi C SOT346 16V 0.3W zener  
166 DTC144VUA Roh N SC70 npn dtr 47k+10k 50V 100mA  
179 FMMT5179 Zet N - 2N5179  
181 PZM18NB1 Phi C SOT346 18V 0.3W zener  
182 PZM18NB2 Phi C SOT346 18V 0.3W zener  
183 PZM18NB3 Phi C SOT346 18V 0.3W zener  
1A BC846A Phi N SOT23 BC546A  
1A BC846AT Phi N SOT416 BC546A

**1Ap** BC846A Phi N SOT23 BC546A  
**1At** BC846A Phi N SOT23 BC546A  
**1At** BC846AW Phi N SOT323 BC546A  
**1A-** BC846AW Phi N SOT323 BC546A  
**1A** FMMT3904 Zet N SOT23 2N3904  
**1A** MMBT3904 Mot N SOT23 2N3904  
**1A** IRLML2402 IR F SOT23 n-ch mosfet 20V 0.9A  
**p1A** PMMT3904 Phi N SOT23 2N3904  
**p1A** PXT3904 Phi N SOT89 2N3904  
**t1A** PMMT3904 Phi N SOT23 2N3904  
**t1A** PMST3904 Phi N SOT323 2N3904  
**-1A** PMST3904 Phi N SOT323 2N3904  
**1AM** MMBT3904L Mot N SOT23 2N3904  
**1B** BC846B Phi N SOT23 BC546B  
**1B** BC846BT Phi N SOT416 BC546B  
**1Bp** BC846B Phi N SOT23 BC546B  
**1Bt** BC846B Phi N SOT23 BC546B  
**1Bt** BC846BW Phi N SOT323 BC546B  
**1B-** BC846BW Phi N SOT323 BC546B  
**1B** FMMT2222 Zet N SOT23 2N2222  
**1B** MMBT2222 Mot N SOT23 2N2222  
**1B** IRLML2803 IR F SOT23 n-ch mosfet 30V 0.9A  
**p1B** PMBT2222 Phi N SOT23 2N2222  
**t1B** PMBT2222 Phi N SOT23 2N2222  
**t1B** PMST2222 Phi N SOT233 2N2222  
**-1B** PMST2222 Phi N SOT323 2N2222  
**1Bs** BC817UPN Sie N SC74 -  
**1Cp** BAP50-05 Phi B SOT23 dual cc GP RF pin diode  
**1C** FMMT-A20 Zet N SOT23 MPSA20  
**1C** MMBTA20L Mot N SOT23 MPS3904  
**1C** IRLML6302 IR F SOT23 p-ch mosfet 20V 0.6A  
**1Cs** BC847S Sie - SOT363 BC457  
**1Dp** BC846 Phi N SOT23 BC456  
**1Dt** BC846 Phi N SOT23 BC456  
**1Dt** BC846W Phi N SOT323 BC456  
**1D-** BC846W Phi N SOT323 BC456  
**1D** MMBTA42 Mot N SOT23 MPSA42 300V npn  
**1D** IRLML5103 IR F SOT23 p-ch mosfet 30V 0.6A  
**p1D** PMBTA42 Phi N SOT23 MPSA42 300V npn  
**p1D** PXTA42 Phi N SOT89 MPSA42 300V npn  
**t1D** PMBTA42 Phi N SOT23 MPSA42 300V npn  
**t1D** PMSTA42 Phi N SOT323 MPSA42 300V npn  
**1Ds** BC846U Sie N SC74 BC456  
**1Ds** BC846U Sie - SOT363 BC456  
**1DN** 2SC4083 Roh N - npn 11V 3.2GHz TV tuners  
**1DR** MSD1328R Mot N SOT346 npn gp 25V 500mA  
**1E** BC847A Phi N SOT23 BC547A  
**1E** BC847AT Phi N SOT416 BC547A  
**1Ep** BC847A Phi N SOT23 BC547A  
**1Et** BC847A Phi N SOT23 BC547A  
**1Et** BC847A Phi N SOT323 BC547A  
**1E-** BC847A Phi N SOT323 BC547A  
**1ER** BC847AR Phi R SOT23R BC547A  
**1E** FMMT-A43 Zet N - MPSA43  
**1E** MMBTA43 Mot N SOT23 MPSA43 200V npn  
**t1E** PMBTA43 Mot N SOT23 MPSA43 200V npn  
**t1E** PMSTA43 Mot N SOT323 MPSA43 200V npn  
**1Es** BC847A Sie N SOT23 BC457  
**1Es** BC847AW Sie N SOT323 BC457  
**1EN** 2SC4084 Roh N - npn 20V 2.0GHz TV tuners  
**1F** BC847B Phi N SOT23 BC547B  
**1F** BC847BT Phi N SOT416 BC547B  
**1Fs** BC847B Sie N SOT23 BC547B  
**1Fs** BC847BT Sie N SC75 BC547B  
**1Fs** BC847BW Sie N SOT323 BC547B  
**1Fp** BC847B Phi N SOT23 BC547B  
**1Ft** BC847B Phi N SOT23 BC547B  
**1Ft** BC847BW Phi N SOT323 BC547B  
**1F-** BC847BW Phi N SOT323 BC547B  
**1FR** BC847BR Phi R SOT23R BC547B

**1F** MMBT5550 Mot N SOT23 2N5550 140V npn  
**p1F** PMBT5550 Phi N SOT23 2N5550 140V npn  
**t1F** PMBT5550 Phi N SOT23 2N5550 140V npn  
**t1F** PMST5550 Phi N SOT323 2N5550 140V npn  
**1FZ** FMBT5550 Zet N SOT23 2N5550 140V npn  
**1G** BC847C Phi N SOT23 BC547C  
**1G** BC847CT Phi N SOT416 BC547C  
**1Gp** BC847C Phi N SOT23 BC547C  
**1Gt** BC847CW Phi N SOT323 BC547C  
**1G-** BC847CW Phi N SOT323 BC547C  
**1Gs** BC847C Sie N SOT23 BC547C  
**1Gs** BC847CW Sie N SOT323 BC547C  
**1GR** BC847CR Phi R SOT23R BC547C  
**1GT** SOA06 SGS N SOT23 MPSA06  
**1G** FMMT-A06 Zet N SOT23 MPSA06  
**1G** MMBTA06 Mot N SOT23 MPSA06  
**p1G** PMMTA06 Phi N SOT23 MPSA06  
**t1G** PMMTA06 Phi N SOT23 MPSA06  
**t1G** PMMTA06 Phi N SOT323 MPSA06  
**1GM** MMBTA06 Mot N SOT23 MPSA06  
**1Hp** BC847 Phi N SOT23 BC547  
**1Ht** BC847 Phi N SOT23 BC547  
**1Ht** BC847W Phi N SOT323 BC547  
**1H-** BC847W Phi N SOT323 BC547  
**1H** FMMT-A05 Zet N - MPSA05  
**1H** MMBTA05 Mot N SOT23 MPSA05  
**t1H** MMBTA05 Phi N SOT323 MPSA05  
**1HT** SOA05 SGS N SOT23 MPSA05  
**1J** BC848A Phi N SOT23 BC548A  
**1Js** BC848A Sie N SOT23 BC548A  
**1Js** BC848AW Sie N SOT323 BC548A  
**1J** FMMT2369 Zet N SOT23 2N2369  
**1J** MMBT2369 Mot N SOT23 MPS2369  
**1Js** BCV61A Sie VQ SOT143 npn current mirror hFe 180  
**1Jp** BCV61A Phi VQ SOT143 npn current mirror hFe 180  
**p1J** PMBT2369 Phi N SOT23 2N2369  
**t1J** PMBT2369 Phi N SOT23 2N2369  
**t1J** PMBT2369 Phi N SOT323 2N2369  
**1JA** MMBT2369A Mot N SOT23 MPS2369A  
**1JR** BC848AR Phi R SOT23R BC548A  
**1JZ** BC848A Zet N SOT23 BC548A  
**1K** BC848B ITT N SOT23 BC548B  
**1Kp** BC848B Phi N SOT23 BC548B  
**1Ks** BC848B Sie N SOT23 BC548B  
**1Ks** BC848BW Sie N SOT323 BC548B  
**1K** MMBT6428 Mot N SOT23 MPSA18 50V  
**p1K** PMBT6428 Phi N SOT23 MPSA18 50V  
**t1K** PMBT6428 Phi N SOT23 MPSA18 50V  
**t1K** PMBT6428 Phi N SOT323 MPSA18 50V  
**1K** FMMT4400 Zet N SOT23 2N4400  
**1Ks** BCV61B Sie VQ SOT143B npn current mirror hFe 290  
**1Kp** BCV61B Phi VQ SOT143B npn current mirror hFe 290  
**1KR** BC848BR Phi R SOT23R BC548B  
**1KM** MMBT6428L Mot N SOT23 MPSA18 50V  
**1KZ** FMMT4400 Zet N SOT23 2N4400  
**1L** BC848C ITT N SOT23 BC548C  
**1Lp** BC848C Phi N SOT23 BC548C  
**1Ls** BC848C Sie N SOT23 BC548C  
**1Ls** BC848CW Sie N SOT323 BC548C  
**1L** MMBT6429 Mot N - MPSA18 45V  
**1L** FMMT4401 Zet N - 2N4401  
**1L** BCV61C Sie VQ SOT143B npn current mirror hFe 520  
**1Lp** BCV61C Phi VQ SOT143B npn current mirror hFe 520  
**p1L** PMBT6429 Phi N SOT23 MPSA18 45V  
**t1L** PMBT6429 Phi N SOT23 MPSA18 45V  
**t1L** PMBT6429 Phi N SOT323 MPSA18 45V  
**1LR** BC848CR Phi R SOT23R BC548C  
**1Mp** BC848 Phi N SOT23 BC548  
**1M** MMBTA13 Mot N SOT23 MPSA13 darlington  
**1Mp** BCV61 Phi VQ SOT143B npn current mirror

**1M** FMMT-A13 Zet N SOT23 MPSA13  
**p1M** PXTA13 Phi N SOT89 MPSA13 darlington  
**p1M** PMBTA13 Phi N SOT23 MPSA13 darlington  
**t1M** PMBTA13 Phi N SOT23 MPSA13 darlington  
**1N** FMMT-A14 Zet N SOT23 MPSA14  
**1N** MMBTA14 Mot N SOT23 MPSA14 darlington  
**1N5** ZTX11N15DF Zet N SOT23 npn 15V 3A low saturation V  
**p1N** PMBTA14 Mot N SOT23 MPSA14 darlington  
**p1N** PXTA14 Mot N SOT89 MPSA14 darlington  
**t1N** PMBTA14 Mot N SOT23 MPSA14 darlington  
**1P** FMMT2222A Zet N - 2N2222A  
**1P** MMBT2222A Mot N SOT23 2N2222A  
**1P** BC847PN Sie DI - pnp/npn separate pair gp AF  
**p1P** PMBT2222A Phi N SOT23 2N2222A  
**p1P** PXT2222A Phi N SOT89 2N2222A  
**t1P** PMBT2222A Phi N SOT23 2N2222A  
**t1P** PMST2222A Phi N SOT323 2N2222A  
**1Q** MMBT5088 Mot N SOT23 MPSA18 Vce 30V  
**p1Q** PMBT5088 Phi N SOT23 MPSA18 Vce 30V  
**t1Q** PMBT5088 Phi N SOT23 MPSA18 Vce 30V  
**t1Q** PMST5088 Phi N SOT323 MPSA18 Vce 30V  
**1R** MMBT5089 Mot N SOT23 MPSA18 Vce 25V  
**t1R** PMST5089 Phi N SOT323 MPSA18 Vce 25V  
**1S** MMBT2369A Nat N SOT23 2N2369A 500MHz sw npn  
**1S** MSC3130 Mot H SOT346 npn RF ft 1.4GHz 10V  
**1T** MMBT3960A Mot N - 2N3960A  
**1U** MMBT2484L Mot N SOT23 MPSA18  
**1V** MMBT6427 Mot H SOT23 2N6426/7 darlington npn  
**1Vp** BF820 Phi N SOT23 npn 300V 50mA BF420  
**1Vt** BF820 Phi N SOT23 npn 300V 50mA BF420  
**1Vt** BF820W Phi N SOT323 npn 300V 50mA BF420  
**1V-** BF820W Phi N SOT323 npn 300V 50mA BF420  
**1W** FMMT3903 Zet N SOT23 2N3903  
**1Wp** BF821 Phi N SOT23 pnp 300V 50mA BF421  
**1Wt** BF821 Phi N SOT23 pnp 300V 50mA BF421  
**1W t** BF822W Phi N SOT323 pnp 300V 50mA BF421  
**1W -** BF822W Phi N SOT323 pnp 300V 50mA BF421  
**1X** MMBT930L Mot N SOT23 MPS3904  
**1Xp** BF822 Phi N SOT23 npn 250V 50mA BF422  
**1Xt** BF822 Phi N SOT23 npn 250V 50mA BF422  
**1Y** MMBT3903 Mot N SOT23 2N3903  
**1Yp** BF823 Phi N SOT23 pnp 250V 50mA BF423  
**1Yt** BF823 Phi N SOT23 pnp 250V 50mA BF423  
**1Z** BAS70-06 Zet A SOT23 dual RF CA schottky diode  
**1Z** MMBT6517 Mot N SOT23 2N6517 npn Vce 350V

## Codes beginning with '2'

### Code Device Manufacturer Base Package Leaded Equivalent/Data

**2** BAT62-02W Sie I SCD80 BAT16 schottky diode  
**2** (**blue**) BAR64-03W Sie I SOD323 pin diode  
**2** 2SC3604 Nec CX - npn RF ft8GHz 12dB@2GHz  
**2** (**white**) BB439 Sie I SOD323 29-5 pF varicap  
**20** MRF5811 Mot X SOT143 npn Rf ft 5GHz 0.2A  
**-20** PDT114WU Phi N SOT323 npn dtr  
**20F** TSDF1220 Tfk X SOT143 ft 12GHz npn 6V 20mA  
**20V** PZM20NB Phi C SOT346 20V 300mW zener  
**20Y** BZV49-C20 Phi O SOT89 20V 1W zener  
**21** Gali-21 MC AZ SOT89 DC-8GHz MMIC amp 14 dB gain  
**22** MMBT4209 Nat N SOT23 pnp sw 850MHz 2N4209  
**22** DTC123EUA Rho N SC70 npn dtr 2k2+2k2 50V 100ma  
**22** DTC123EKA Rho N SC59 npn dtr 2k2+2k2 50V 100ma  
**22V** PZM22NB Phi C SOT346 22V 300mW zener  
**22Y** BZV49-C22 Phi O SOT89 22V 1W zener  
**23** MMBT3646 Nat N SOT23 npn sw 350MHz 2N3646  
**23** DTC143EUA Roh N SC70 pnp dtr 50V 100mA 4k7+ 4k7  
**23** DTC143EKA Roh N SC59 pnp dtr 50V 100mA 4k7+ 4k7  
**-23** PDTA114TU Phi N SOT323 pnp dtr R1 10k  
**t23** PDTA114TU Phi N SOT323 pnp dtr R1 10k  
**24** MMBD2101 Nat C SOT23 Si diode 100V 200mA  
**24** DTC114ECA Roh N SOT23 npn dtr 50V 100mA 10k + 10k  
**24** DTC114EUA Roh N SC70 npn dtr 50V 100mA 10k + 10k

**24** DTC114EKA Roh N SC59 npn dtr 50V 100mA 10k + 10k  
**24** 2SC5006 Nec N - npn RF fT 4.5GHz @3V 7mA  
**-24** PDTC114TU Phi N SOT323 npn dtr R1 10k  
**t24** PDTC114TU Phi N SOT323 npn dtr R1 10k  
**24V** PZM24NB Phi C SOT346 24V 300mW Zener  
**24Y** BZV49-C24 Phi O SOT89 24V 1W zener  
**25** MMBD2102 Nat K SOT23 Si diode 100V 200mA  
**25** DTC124ECA Roh N SOT23 npn dtr 50V 100mA 22k + 22k  
**25** DTC124EKA Roh N SC59 npn dtr 50V 100mA 22k + 22k  
**25** DTC124EUA Roh N SC70 npn dtr 50V 100mA 22k + 22k  
**26** MMBD2103 Nat D SOT23 dual MMBD1201  
**26** DTC144EKA Roh N SC59 npn dtr 50V 30mA 47k + 47k  
**26** DTC144EUA Roh N SC70 npn dtr 50V 30mA 47k + 47k  
**27** MMBD2104 Nat B SOT23 dual cc MMBD1201  
**27V** PZM27NB Phi C SOT346 27V 300mW Zener  
**27Y** BZV49-C27 Phi O SOT89 27V 1W zener  
**28** BFP280T Trk W - npn RF fT 7GHz 8V 10mA  
**28** MMBD2105 Nat A SOT23 dual ca MMBD1201  
**-28** PDTA114WU Phi N SOT323 pnp dtr  
**29** MMBD1401 Nat C SOT23 Si diode 200V 100mA  
**29** DTC115EE Roh N EMT3 npn dtr 100k +100k 50V 20mA  
**29** DTC115EUA Roh N SC70 npn dtr 100k +100k 50V 20mA  
**29** DTC115EKA Roh N SC59 npn dtr 100k +100k 50V 20mA  
**200** SSTPAD200 Sil J - PAD-200 200pA leakage diode  
**201** PZM20NB1 Phi C SOT346 20V 300mW Zener  
**202** PZM20NB2 Phi C SOT346 20V 300mW Zener  
**203** PZM20NB3 Phi C SOT346 20V 300mW Zener  
**221** PZM22NB1 Phi C SOT346 22V 300mW Zener  
**222** PZM22NB2 Phi C SOT346 22V 300mW Zener  
**223** PZM22NB3 Phi C SOT346 22V 300mW Zener  
**241** PZM24NB Phi C SOT346 24V 300mW Zener  
**242** PZM24NB Phi C SOT346 24V 300mW Zener  
**243** PZM20NB Phi C SOT346 24V 300mW Zener  
**271** PZM2.7NB1 Phi C SOT346 2.7V 300mW Zener  
**272** PZM2.7NB2 Phi C SOT346 2.7V 300mW Zener  
**2A** MMBT3906L Mot N SOT23 2N3906  
**2A** MMBT3906W Mot N SOT323 2N3906  
**2A** FMMT3906 Zet N SOT23 2N3906  
**t2A** PMBT3906 Phi N SOT23 2N3906  
**t2A** PMST3906 Phi N SOT323 2N3906  
**p2A** PMBT3906 Phi N SOT23 2N3906  
**p2A** PXT3906 Phi O SOT89 2N3906  
**2A4** PZM2.4NB2A Phi A SOT346 dual 2.4V cc Zener  
**2A7** PZM2.7NB2A Phi A SOT346 dual 2.7V cc Zener  
**2B** BC849B ITT N SOT23 BC549B  
**2Bs** BC849B Sie N SOT23 BC549B  
**2Bs** BC849BW Sie N SOT323 BC549B  
**2Bp** BC849B Phi N SOT23 BC549B  
**2Bt** BC849BW Phi N SOT323 BC549B  
**2B-** BC849BW Phi N SOT323 BC549B  
**2B** FMMT2907 Zet N SOT23 2N2907  
**2B** MMBT2907 Mot N SOT23 MPS2907  
**p2B** PMBT2907 Phi N SOT23 2N2907  
**t2B** PMBT2907 Phi N SOT23 2N2907  
**2BR** BC849BR Phi R SOT23R BC549B  
**2BZ** FMMT2907 Zet N SOT23 2N2907  
**2C** BC849C ITT N SOT23 BC549C  
**2Cs** BC849C Sie N SOT23 BC549C  
**2Cs** BC849CW Sie N SOT323 BC549C  
**2Cp** BC849C Phi N SOT23 BC549C  
**2Ct** BC849C Phi N SOT23 BC549C  
**2Ct** BC849CW Phi N SOT323 BC549C  
**2C-** BC849CW Phi N SOT323 BC549C  
**2C** MMBTA70 Mot N SOT23 MPSA70  
**2CR** BC849CR Phi R SOT23R BC549C  
**2CZ** FMMTA70 Zet N SOT23 MPSA70  
**2D** MMBTA92 Mot N SOT23 MPSA92 pnp Vce 300V  
**p2D** PMBTA92 Phi N SOT23 MPSA92 pnp Vce 300V  
**p2D** PXTA92 Phi O SOT89 MPSA92 pnp Vce 300V  
**t2D** PMBTA92 Phi N SOT23 MPSA92 pnp Vce 300V

**t2D** PMSTA92 Phi N SOT323 MPSA92 pnp Vce 300V  
**2E** MMBTA93 Mot N SOT23 MPSA93 pnp Vce 200V  
**2E** FMMT-A93 Zet N SOT23 MPSA93  
**t2E** PMBTA93 Phi N SOT23 MPSA93 pnp Vce 200V  
**t2E** PMSTA93 Phi N SOT323 MPSA93 pnp Vce 200V  
**2F** BC850B ITT N SOT23 BC550B  
**2Fs** BC850B Sie N SOT23 BC550B  
**2Fs** BC850BW Sie N SOT323 BC550B  
**2Fp** BC850B Phi N SOT23 BC550B  
**2Ft** BC850B Phi N SOT23 BC550B  
**2Ft** BC850BW Phi N SOT323 BC550B  
**2F-** BC850BW Phi N SOT323 BC550B  
**2F** FMMT2907A Zet N SOT23 2N2907A  
**2F** MMBT2907A Mot N SOT23 MPS2907A  
**2F** MMBT2907AW Mot N SOT323 MPS2907A  
**p2F** PMBT2907A Phi N SOT23 2N2907A  
**p2F** PXT2907A Phi O SOT89 2N2907A  
**t2F** PMBT2907A Phi N SOT23 2N2907A  
**t2F** PMBT2907A Phi N SOT323 2N2907A  
**2FR** BC850BR Phi R SOT23R BC550B  
**2G** BC850C ITT N SOT23 BC550C  
**2Gs** BC850C Sie N SOT23 BC550C  
**2Gp** BC850C Phi N SOT23 BC550C  
**2Gt** BC850C Phi N SOT323 BC550C  
**2Gt** BC850CW Phi N SOT323 BC550C  
**2G-** BC850CW Phi N SOT323 BC550C  
**2G** FMMT-A56 Zet N SOT23 MPSA56  
**2G** MMBTA56 Mot N SOT23 MPSA56  
**p2G** PMBTA56 Phi N SOT23 MPSA56  
**t2G** PMBTA56 Phi N SOT23 MPSA56  
**t2G** PMSTA56 Phi N SOT323 MPSA56  
**2GM** MMBTA56 Mot N SOT23 MPSA56  
**2GR** BC850CR Phi R SOT23R BC550C  
**2GT** SOA56 SGS N SOT23 MPSA56  
**2H** FMMT-A55 Zet N SOT23 MPSA55  
**2HT** SOA55 SGS N SOT23 MPSA55  
**2H** MMBTA55 Mot N SOT23 MPSA55  
**t2H** PMBTA55 Phi N SOT23 MPSA55  
**t2H** PMSTA55 Phi N SOT323 MPSA55  
**2J** MMBT3640 Mot N SOT23 MPS3640 pnp sw  
**2K** FMMT4402 Zet N SOT23 2N4402  
**2K** MMBT8598 Mot N - 2N4125 pnp 60V  
**2L** MMBT5401 Mot N SOT23 2N5401 pnp 150V  
**2L** FMMT4403 Zet N SOT23 2N4403  
**p2L** PMBT5401 Phi N SOT23 2N5401 pnp 150V  
**t2L** PMBT5401 Phi N SOT23 2N5401 pnp 150V  
**t2L** PMST5401 Phi N SOT323 2N5401 pnp 150V  
**2M** FMMT5087 Zet N SOT23 2N5087  
**2M** MMBT404 Mot N SOT23 pnp-chopper 24V 150mA  
**2N** MMBT404A Mot N SOT23 pnp-chopper 35V 150mA  
**2N0** ZXT11N20DF Zet N SOT23 npn 20V 2.5A low sat switch  
**2P** FMMT2222R Zet R SOT23R 2N2222  
**2P** MMBT5086 Mot N SOT23 2N5086  
**2Q** MMBT5087 Mot N SOT23 2N5087  
**2R** HSMS-8102 HP Z. SOT23 10-14GHz schottky mixer pair  
**2T** SO4403 SGS N SOT23 2N4403  
**2T** MMBT4403 Mot N SOT23 2N4403  
**p2T** PMBT4403 Phi N SOT23 2N4403  
**p2T** PXT4403 Phi O SOT89 2N4403  
**t2T** PMBT4403 Phi N SOT23 2N4403  
**t2T** PMST4403 Phi N SOT323 2N4403  
**2T** HT2 Zet N SOT23 pnp 80V 100mA  
**2U** MMBTA63 Mot N SOT23 MPSA63 darlington  
**t2U** PMBTA63 Phi N SOT23 MPSA63 darlington  
**2V** MMBTA64 Mot N SOT23 MPSA64 darlington  
**p2V** PXTA64 Phi O SOT89 MPSA64 darlington  
**t2V** PMBTA64 Phi H SOT23 MPSA64 darlington  
**2V4** PZM2.4NB Phi C SOT346 2.4V 300mW Zener  
**2V7** PZM2.7NB Phi C SOT346 2.7V 300mW Zener  
**2W** FMMT3905 Zet N SOT23 2N3905

**2W** MMBT8599 Mot N - 2N4125 Vce 80V pnp  
**2X** SO4401 SGS N SOT23 2N4401  
**2X** MMBT4401 Mot N SOT23 2N4401  
**p2X** PMBT4401 Phi N SOT23 2N4401  
**p2X** Pxt4401 Phi O SOT89 2N4401  
**t2X** PMBT4401 Phi N SOT23 2N4401  
**t2X** PMST4401 Phi N SOT323 2N4401  
**2Y4** BZV49-C2V4 Phi O SOT89 2.4V 1W zener  
**2Y7** BZV49-C2V7 Phi O SOT89 2.7V 1W zener  
**2Z** MMBT6520 Mot N SOT23 2N6520 pnp Vce 350V  
**2Z** BAS70-04 Zet D SOT23 dual series RF schottky 70V 15mA  
**2Z5** BAS70-05 Zet B SOT23 dual cc RF Schottky 70V 15mA

### Codes beginning with '3'

#### Code Device Manufacturer Base Package Leaded Equivalent/Data

**3** BAT60A Sie I SOD323 10V 3A sw schottky  
**3** BAT62-02W Sie I SCD80 -  
**30** MUN5330DW1 Mot DP SOT363 npn/pnp dtr 1k0+1k0  
**30V** PZM30NB1 Phi C SOT346 30V 300mW zener  
**30Y** BZV49-C30 Phi O SOT89 30V 1W zener  
**301** FDV301N Fch M SOT23 n-ch 'digital' fet 25V 0.22A  
**302** FDV302P Fch M SOT23 p-ch 'digital' fet 25V 0.13A  
**303** FDV303N Fch M SOT23 n-ch 'digital' fet 25V 0.68A  
**304** FDV304P Fch M SOT23 p-ch 'digital' fet 25V 0.46A  
**31** MUN5331DW1 Mot DP SOT363 npn/pnp dtr 2k2+2k2  
**31** MMBD1402 Nat K SOT23 Si diode 200V 100mA  
**p31** PDA143XT Phi N SOT23 pnp dtr 4k7+10k  
**t31** PDA143XT Phi N SOT23 pnp dtr 4k7+10k  
**32** MUN5332DW1 Mot DP SOT363 npn/pnp dtr 4k7+4k7  
**32** MMBD1403 Nat D SOT23 dual Si diode 200V 100mA  
**32** BAT32 Sie CS - 18GHz zero-bias schottky  
**p32** PDT143XT Phi N SOT23 pnp dtr 4k7+10k  
**t32** PDT143XT Phi N SOT23 pnp dtr 4k7+10ks  
**33** MUN5333DW1 Mot DP SOT363 npn/pnp dtr 4k7+47k  
**33** DTA143XE Roh N EMT3 pnp dtr 4k7+10k 50V 100mA  
**33** DTA143XUA Roh N SC70 pnp sw 4k7+10k bias res 50V 100mA  
**33** DTA143XKA Roh N SC59 pnp sw 4k7+10k bias res 50V 100mA  
**33** MMBD1404 Nat B SOT23 dual cc Si diode 200V 100mA  
**33** Gali-33 MC AZ SOT89 DC-4GHz MMIC amp 19dB gain  
**33V** PZM33NB1 Phi C SOT346 33 300mW zener  
**33Y** BZV49-C33 Phi O SOT89 33V 1W zener  
**34** MUN5334DW1 Mot DP SOT363 npn/pnp dtr 22k+47k  
**34** MMBD1405 Nat A SOT23 dual ca Si diode 200V 100mA  
**331** NDS331N Fch M SOT23 n-ch mosfet 1.3A 20V  
**331** PZM3.3NB1 Phi C SOT346 3.3V 300mW zener  
**332** PZM3.3NB2 Phi C SOT346 3.3V 300mW zener  
**332** NDS332N Fch M SOT23 p-ch mosfet 0.4A, 1A pk, 20V  
**335** NDS335N Fch M SOT23 n-ch mosfet 70 mA, 1.7A pk, 20V  
**336** NDS336N Fch M SOT23 p-ch mosfet 0.27A, 1.2A pk, 20V  
**337** NDS337N Fch M SOT23 n-ch mosfet 50 mA, 2.5A pk 20V  
**338** NDS338N Fch M SOT23 p-ch mosfet 0.13A, 1.6Apk 20V  
**34** 2SC5007 Nec N - npn RF ft 7GHz @3V 7mA  
**340** FDV340P Fch M SOT23 p-ch mosfet 20V 70 mA  
**35** MUN5335DW1 Mot DP SOT363 npn/pnp dtr 2k2+47k  
**35** DTA124XE Roh N EMT3 pnp dtr 22k+47k 50V 50mA  
**35** DTA124XUA Roh N SC70 pnp dtr 22k+47k 50V 50mA  
**35** DTA124XKA Roh N SC59 pnp dtr 22k+47k 50V 50mA  
**351** NDS351N Fch M SOT23 n-ch mosfet 1.1A 30V  
**352** NDS352N Fch M SOT23 p-ch mosfet 0.5A 20V  
**355** NDS355N Fch M SOT23 n-ch mosfet 0.1A, 1.6A pk 30V  
**356** NDS356N Fch M SOT23 p-ch mosfet 0.3A, 1.1A pk 20V  
**357** NDS357N Fch M SOT23 n-ch mosfet 2.5Apk 30V  
**358** NDS358N Fch M SOT23 p-ch mosfet 0.2A, 1.6A pk 30V  
**358** FDN358N Fch M SOT23 p-ch mosfet 0.2A 1.6A pk 30V  
**360** FDN360P Fch M SOT23 p-ch mosfet 80mA, 2a PK, 30V  
**361** PZM3.6NB1 Phi C SOT346 3.6V 300mW Zener  
**362** PZM3.3NB2 Phi C SOT346 3.6V 300mW Zener  
**36V** PZM36NB1 Phi C SOT346 36V 300mW Zener  
**36Y** BZV49-C36 Phi O SOT89 36V 1W zener  
**391** PZM3.9NB1 Phi C SOT346 3.9V 300mW Zener  
**392** PZM3.9NB2 Phi C SOT346 3.9V 300mW Zener

**39V** PZM39NB1 Phi C SOT346 39V 300mW Zener  
**39Y** BZV49-C39 Phi O SOT89 39V 1W zener  
**3A** BC856A ITT N SOT23 BC556A  
**3A** BC856AT Phi N SOT416 BC556A  
**3Ap** BC856A Phi N SOT23 BC556A  
**3At** BC856A Phi N SOT23 BC556A  
**3As** BC856A Sie N SOT23 BC556A  
**3At** BC856AW Phi N SOT323 BC556A  
**3A-** BC856AW Phi N SOT323 BC556A  
**3A** MMBTH24 Mot N SOT23 VHF mixer npn fT 600MHz  
**3A0** PZM3.0NB2A Phi C SOT346 dual 3.0V Zener  
**3A3** PZM3.3NB2A Phi C SOT346 dual 3.3V Zener  
**3A6** PZM3.6NB2A Phi C SOT346 dual 3.6V Zener  
**3A9** PZM3.9NB2A Phi C SOT346 dual 3.9V Zener  
**3AR** BC856AR Phi R SOT23R BC556A  
**3B** BC856B ITT N SOT23 BC556B  
**3B** BC856BT Phi N SOT416 BC556B  
**3Bp** BC856B Phi N SOT23 BC556B  
**3Bs** BC856B Sie N SOT23 BC556B  
**3Bt** BC856B Phi N SOT23 BC556B  
**3Bt** BC856BW Phi N SOT323 BC556B  
**3B-** BC856BW Phi N SOT323 BC556B  
**3B** FMMT918 Zet N SOT23 2N918  
**3B** MMBT918 Mot N SOT23 2N918  
**3BR** BC856BR Phi R SOT23 BC556B  
**3C** FMMTA20R Zet R SOT23R MPSA20  
**3C** BC857 Sie DO - pnp separate pair gp AF  
**3D** BC856 Phi N SOT23 BC556 hfe 75 min  
**3Dp** BC856 Phi N SOT23 BC556 hfe 75 min  
**3Dt** BC856 Phi N SOT23 BC556 hfe 75 min  
**3Dt** BC856W Phi N SOT323 BC556 hfe 75 min  
**3D-** BC856W Phi N SOT323 BC556 hfe 75 min  
**3D** MMBTH81L Mot N SOT23 UHF pnp fT 600MHz  
**3D** BC856S Sie DO - pnp separate pair gp AF  
**3E** BC857A Phi N SOT23 BC557A  
**3E** BC857AT Phi N SOT416 BC557A  
**3Ep** BC857A Phi N SOT23 BC557A  
**3Et** BC857A Phi N SOT23 BC557A  
**3Et** BC857A Phi N SOT323 BC557A  
**3E-** BC857A Phi N SOT323 BC557A  
**3E** MMBTH10 Mot N SOT23 MPSH10 fT 650MHz  
**3E** FMMT-A42 Zet N SOT23 MPSA42  
**3EM** MMBTH10L Mot N SOT23 VHF amp 650MHz fT  
**3ER** BC857AR Phi R SOT23R BC557A  
**3EZ** FMMTH10 Zet N SOT23 npn fT 650MHz  
**3F** BC857B Phi N SOT23 BC557B  
**3F** BC857BT Phi N SOT416 BC557B  
**3Fp** BC857B Phi N SOT23 BC557B  
**3Fs** BC857B Sie N SOT23 BC557B  
**3Ft** BC857B Phi N SOT23 BC557B  
**3Ft** BC857BW Phi N SOT323 BC557B  
**3Ft** BC857BS Phi N SOT363 BC557B  
**3F-** BC857BW Phi N SOT323 BC557B  
**3FR** BC857BR Phi R SOT23R BC557B  
**3G** BC857C Phi N SOT23 BC557C  
**3Gp** BC857C Phi N SOT23 BC557C  
**3G** BC857C Phi N SOT23 BC557C  
**3Gs** BC857C Sie N SOT23 BC557C  
**3Gt** BC857C Phi N SOT23 BC557C  
**3Gt** BC857CW Phi N SOT323 BC557C  
**3G-** BC857CW Phi N SOT323 BC557C  
**3G** MMBTH11 NS N SOT23 -  
**3G** MGSF3454X Mot DK TSOP6 n-ch enh tmosfet 1.75A  
**3GR** BC857CR Phi R SOT23R BC557CR  
**3Hp** BC857C Phi N SOT23 BC557  
**3Ht** BC857C Phi N SOT23 BC557  
**3Ht** BC857CW Phi N SOT323 BC557  
**3H** MMBTH30 NS N SOT23 -  
**3H-** BC857CW Phi N SOT323 BC557  
**3J** MMBTH69 Mot N SOT23 pnp UHF fT 2GHz

**3J** BC858A Phi N SOT23 BC558A  
**3Js** BC858A Sie N SOT23 BC558A  
**3JR** BC858AR Phi R SOT23R BC558A  
**3Js** BCV62A Sie VQ SOT143 pnp current mirror hFe 180  
**3Jp** BCV62A Phi VQ SOT143 pnp current mirror hFe 180  
**3K** BC858B Phi N SOT23 BC558B  
**3Ks** BCV62B Sie VQ SOT143 npn current mirror hFe 290  
**3Kp** BCV62B Phi VQ SOT143 npn current mirror hFe 290  
**3KR** BC858BR Phi R SOT23R BC558B  
**3L** BC858C Phi N SOT23 BC558C  
**3LR** BC858CR Phi R SOT23R BC558C  
**3Ls** BCV62C Sie VQ SOT143 pnp current mirror hFe 520  
**3Lp** BCV62C Phi VQ SOT143 pnp current mirror hFe 520  
**3M** BC858 Phi N SOT23 BC558  
**3M** FMMT5087R Zet R SOT23R 2N5087 BC322  
**3Ms** BCV62 Sie VQ SOT143 pnp current mirror  
**3Mp** BCV62 Phi VQ SOT143 pnp current mirror  
**3N** MMBT4402 Nat N SOT23 2N4402 pnp  
**3P** FMT2222AR Zet R SOT23R 2N2222A  
**3R** MMBT5571 Nat N SOT23 pnp sw 850MHz  
**3S** MMBT5551 Nat N SOT23 npn 160V  
**3T** HT3 Zet N SOT23 npn 80V 100mA  
**3V0** PZM3.0NB Phi C SOT346 3.0V 300mW Zener  
**3V3** PZM3.3NB Phi C SOT346 3.3V 300mW Zener  
**3V6** PZM3.6NB Phi C SOT346 3.6V 300mW Zener  
**3V9** PZM3.9NB Phi C SOT346 3.9V 300mW Zener  
**3W** FMMT-A12 Zet N - MPSA12  
**3Y3** BZV49-C3V3 Phi O SOT89 3.3V 1W zener  
**3Y6** BZV49-C3V6 Phi O SOT89 3.6V 1W zener  
**3Y9** BZV49-C3V9 Phi O SOT89 3.9V 1W zener

## Codes beginning with '4'

### Code Device Manufacturer Base Package Leaded Equivalent/Data

**4 (white)** BAS140W Sie I SOD323 40V 120mA sw schottky  
**4 (yellow)** BB644 Sie I SOD323 Varicap 42-2.5pF  
**4 (red)** BB57-03W Sie I SOD323 Varicap  
**4** BB664 Sie I SCD80 Varicap 42-2.5pF  
**41** BAT14-115S Sie CS SOT173 40GHz schottky diode  
**41** BAT14-115R Sie CZ SOT173 40GHz schottky ring quad  
**41A** FMMT491A Zet N SOT23 npn 40v 1A max  
**41D** BAT14-115D Sie CY SOT173 40GHz schottky dual  
**42** BAT14-025S Sie CS SOT173 4GHz schottky diode  
**42** BAT14-025R Sie CZ SOT173 4GHz schottky ring quad  
**42D** BAT14-025D Sie CY SOT173 4GHz schottky dual  
**43** BAS40 Sie C SOT23 schottky diode 40V 100mA  
**43** DTA143EE Mot N SOT416 pnp dtr 4k7 + 4k7  
**43** DTC143XE Roh N EMT3 npn dtr 4k7+10k 50V 100mA  
**43** DTC143XUA Roh N SC70 npn dtr 4k7+10k 50V 100mA  
**43** DTC143XKA Roh N SC59 npn dtr 4k7+10k 50V 100mA  
**43V** PZM43NB Phi C SOT346 43V 0.3W zener  
**43Y** BZV49-C43 Phi O SOT89 43V 1W zener  
**44** BAS40-04 Sie D SOT23 dual series BAS40  
**44** BAS40-04W Sie D SOT323 dual series BAS40  
**44** 2SC5009 Nec N - npn RF ft 12GHz @3V 5mA  
**45** BAS40-05 Sie A SOT23 dual ca BAS40  
**45** BAS40-05W Sie A SOT323 dual ca BAS40  
**45** BAT14-055S Sie CS SOT173 8GHz schottky diode  
**45** BAT14-055R Sie CZ SOT173 8GHz schottky ring quad  
**45** DTC124XE Roh N EMT3 npn dtr 22k+47k 50V 50mA  
**45** DTC124XUA Roh N SC70 npn dtr 22k+47k 50V 50mA  
**45** DTC124XKA Roh N SC59 npn dtr 22k+47k 50V 50mA  
**45D** BAT14-055D Sie CY SOT173 8GHz schottky dual  
**46** BAS40-06 Sie B SOT23 dual cc BAS40  
**46** BAS40-06W Sie B SOT323 dual cc BAS40  
**46** MBT3946DW Mot DP - 2N3904/2N3906 pair  
**47** BAS40-07 Sie S SOT143 dual BAS40  
**47** BAS40-07W Sie S SOT343 dual BAS40  
**47V** PZM47NB Phi C SOT346 47V 0.3W zener  
**47Y** BZV49-C47 Phi O SOT89 47V 1W zener  
**49** BAT14-095S Sie CS SOT173 18GHz schottky diode  
**49** BAT14-095R Sie CZ SOT173 18GHz schottky ring quad

49D BAT14-095D Sie CY SOT173 18GHz schottky dual  
413 FMMT413 Zet N SOT23 npn avalanche 150v 0.1A  
415 FMMT415 Zet N SOT23 npn avalanche 260v 0.1A  
417 FMMT417 Zet N SOT23 npn avalanche 320v 0.1A  
431 PZM4.3NB1 Phi C SOT346 4.3V 0.3W zener  
432 PZM4.3NB2 Phi C SOT346 4.3V 0.3W zener  
433 PZM4.3NB3 Phi C SOT346 4.3V 0.3W zener  
449 FMMT449 Zet N SOT23 npn 50V 1A low Vce sat  
451 FMMT451 Zet N SOT23 npn 60V 1A  
455 FMMT455 Zet N SOT23 NPN 140V 1A  
458 FMMT458 Zet N SOT23 npn 400V 0.4A  
471 PZM4.7NB1 Phi C SOT346 4.7V 0.3W zener  
472 PZM4.7NB2 Phi C SOT346 4.7V 0.3W zener  
473 PZM4.7NB3 Phi C SOT346 4.7V 0.3W zener  
491 FMMT491 Zet N SOT23 ZTX 450/451  
493 FMMT493 Zet N SOT23 ZTX 453  
494 FMMT494 Zet N SOT23 npn 120V 1A  
495 FMMT495 Zet N SOT23 npn 170V 1A  
497 FMMT497 Zet N SOT23 npn 300V 0.5A  
4A MMBV109 Mot C SOT23 MV209 varicap  
4A FMMV109 Zet C SOT23 MV209 varicap  
4A HD3A Zet C - 75V 100mA sw diode  
4A BC859A ITT N SOT23 BC559A  
4Ap BC859A Phi N SOT23 BC559A  
4As BC859AW Sie N SOT323 BC559A  
4As BC859A Sie N SOT23 BC559A  
4A3 PZM4.3NB2A Phi A SOT346 dual ca 4.3V Zener  
4A7 PZM4.7NB2A Phi A SOT346 dual ca 4.7V Zener  
4AR BC859AR Phi R SOT23R BC559A  
4B MMBV432 Mot B - dual cc varicap 1.5-45pF  
4B BC859B ITT N SOT23 BC559B  
4Bs BC859B Sie N SOT23 BC559B  
4Bs BC859BW Sie N SOT323 BC559B  
4Bp BC859B Phi N SOT23 BC559B  
4Bt BC859B Phi N SOT23 BC559B  
4Bt BC859BW Phi N SOT323 BC559B  
4B- BC859BW Phi N SOT323 BC559B  
4BR BC859BR Phi R SOT23R BC559B  
4C BC859C ITT N SOT23 BC559C  
4Cs BC859C Sie N SOT23 BC559C  
4Cs BC859CW Sie N SOT323 BC559C  
4Cp BC859C Phi N SOT23 BC559C  
4Ct BC859C Phi N SOT23 BC559C  
4Ct BC859CW Phi N SOT323 BC559C  
4C- BC859CW Phi N SOT323 BC559C  
4C MMBV3102 Mot C SOT23 varicap 6-35pF  
4C BC859C Phi N SOT23 BC559C  
4CR BC859CR Phi R SOT23R BC559C  
4D BC859B Phi N SOT23 BC559B  
4Dt BC859W Phi N SOT323 BC559B  
4D- BC859W Phi N SOT323 BC559B  
4D MMBV3401 Mot C SOT23 VHF pin diode  
4D HD3A Zet C SOT23 sw diode 75V 100mA  
4E BC860A Phi N SOT23 BC560A  
4E FMMT-A92 Zet N SOT23 MPSA92  
4E MMBV105G Mot C SOT23 MV105 varicap  
4ER BC860AR Phi R SOT23R BC560A  
4F MMBD353 Mot Z SOT23 dual MBD101  
4F BC860B Phi N SOT23 BC560B  
4F Gali-4F MC AZ SOT89 DC-4GHz MMIC amp 15 dBm o/p  
4Fs BC860B Sie N SOT23 BC560B  
4Fs BC860BW Sie N SOT323 BC560B  
4Fp BC860B Phi N SOT23 BC560B  
4Ft BC860B Phi N SOT23 BC560B  
4Ft BC860BW Phi N SOT323 BC560B  
4F- BC860BW Phi N SOT323 BC560B  
4FR BC860BR Phi R SOT23 BC560B  
4G MMBV2101 Mot C SOT23 MV2101 varicap  
4G BC860C Phi N SOT23 BC560C  
4Gs BC860C Sie N SOT23 BC560C

**4Gs** BC860CW Sie N SOT323 BC560C  
**4Gp** BC860C Phi N SOT23 BC560C  
**4Gt** BC860C Phi N SOT23 BC560C  
**4Gt** BC860CW Phi N SOT323 BC560C  
**4G-** BC860CW Phi N SOT323 BC560C  
**4GR** BC860CR Phi R SOT23 BC560CR  
**4H** MMBV2103 Mot C SOT23 MV2103 varicap  
**4Hp** BC860 Phi N SOT23 BC560  
**4Ht** BC860W Phi N SOT323 BC560  
**4H-** BC860W Phi N SOT323 BC560  
**4J** FMMT38A Zet N SOT23 BCX38A  
**4J** MMBV2109 Mot C SOT23 MV2109 varicap  
**4K** BAP64-04 Phi D - dual series 3GHz pin diode  
**4K** MMSB3000 Mot I SOD123 Si diode 30V 0.2A  
**4L** BAP50-04 Phi D - dual series GP RF pin diode  
**4M** MMBD101 Mot C SOT23 MBD101 schottky diode  
**4Ms** BAT240A Sie EQ SOT143 dual schottky 250V 0.4A  
**4R** MMBV3700 Mot C SOT23 200V vhf pin diode  
**4S** MMBD201 Mot C SOT23 MBD201  
**4T** MMBD301 Mot C SOT23 MBD301 UHF schottky diode  
**4U** MMBV2105 Mot C SOT23 MV2105 varicap  
**4V** MMBV2106 Mot C SOT23 MV2106 varicap  
**4V** BCW65AR Zet R SOT23R npn 32V 0.8A  
**4V3** PZM4.3NB Phi C SOT346 4.3V 0.3W zener  
**4V7** PZM4.7NB Phi C SOT346 4.7V 0.3W zener  
**4W** MMBV2107 Mot C SOT23 MV2107 varicap  
**4W** BCW67AR Zet R SOT23R pnp 32V 0.8A  
**4Y** MMBV2102 Mot C SOT23 MV2102 varicap  
**4Y3** BZV49-C4V3 Phi O SOT89 4.3V 1W zener  
**4Y7** BZV49-C4V7 Phi O SOT89 4.7V 1W zener  
**4X** MMBV2108 Mot C SOT23 MV2108 varicap  
**4Z** MMBV2104 Mot C SOT23 MV2104 varicap

## Codes beginning with '5'

### Code Device Manufacturer Base Package Leaded Equivalent/Data

**5 (white)** BAT60B Sie I 10V 3A sw Schottky  
**5 (red)** BBY57-03W Sie I SOD323 varicap  
**500** SSTPAD500 Sil J PAD-500 500pA leakage diode  
**51** BAT15-115S Sie CS SOT173 40GHz schottky diode  
**51** BAT15-115R Sie CZ SOT173 40GHz schottky ring quad  
**51D** BAT15-115D Sie CY SOT173 40GHz schottky dual  
**51V** PZM51NB Phi C SOT346 51V 0.3W zener  
**51Y** BZV49-C51 Phi O SOT89 51V 1W zener  
**52** BAT15-025S Sie CS SOT173 4GHz schottky diode  
**52** BAT15-025R Sie CZ SOT173 4GHz schottky ring quad  
**52** Gali-52 MC AZ SOT89 DC-2GHz MMIC amp 23 dB gain  
**52** BAS52-02V Inf I SC79 Schottky diode 45V 750mA  
**52** DTA123YE Roh N EMT3 pnp dtr 2k2 +10k 50V 100mA  
**52** DTA123YUA Roh N SC70 pnp dtr 2k2 +10k 50V 100mA  
**52** DTA123YKA Roh N SC59 pnp dtr 2k2 +10k 50V 100mA  
**52D** BAT15-025D Sie CY SOT173 4GHz schottky dual  
**53s** BAT17 Sie C SOT23 schottky diode 4V 100mA  
**54** DTA114YE Roh N EMT3 pnp dtr 10k + 47k 50V 100mA  
**54** DTA114YUA Roh N SC70 pnp dtr 10k + 47k 50V 100mA  
**54** DTA114YKA Roh N SC59 pnp dtr 10k + 47k 50V 100mA  
**54s** BAT17-04 Sie D SOT23 dual series BAT17  
**54s** BAT17-04W Sie D SOT323 dual series BAT17  
**55** BAT15-055S Sie CS SOT173 8GHz schottky diode  
**55** BAT15-055R Sie CZ SOT173 8GHz schottky ring quad  
**55** Gali-55 MC AZ SOT89 DC-4GHz MMIC amp 21 dB gain  
**55D** BAT15-055D Sie CY SOT173 8GHz schottky dual  
**55s** BAT17-05 Sie A SOT23 dual ca BAT17  
**55s** BAT17-05W Sie A SOT323 dual ca BAT17  
**56s** BAT17-06 Sie B SOT23 dual cc BAT17  
**56s** BAT17-06W Sie B SOT323 dual cc BAT17  
**56V** PZM56NB Phi C SOT346 56V 0.3W zener  
**56Y** BZV49-C56 Phi O SOT89 56V 1W zener  
**57s** BAT17-07 Sie S SOT143 dual BAT17  
**57** BFQ57 Sie CX SOT173 npn 6.5GHz 16V/35mA  
**58** BFQ58 Sie CX SOT173 npn 6.5GHz 16V/30mA  
**59** BAT15-095S Sie CS SOT173 18GHz schottky diode

**59** BAT15-095R Sie CZ SOT173 18GHz schottky ring quad  
**59D** BAT15-095D Sie CY SOT173 18GHz schottky dual  
**511** PZM5.1NB1 Phi C SOT346 5.1V 0.3W zener  
**512** PZM5.1NB2 Phi C SOT346 5.1V 0.3W zener  
**513** PZM5.1NB3 Phi C SOT346 5.1V 0.3W zener  
**561** PZM5.1NB1 Phi C SOT346 5.6V 0.3W zener  
**562** PZM5.1NB2 Phi C SOT346 5.6V 0.3W zener  
**563** PZM5.1NB3 Phi C SOT346 5.6V 0.3W zener  
**558** FMMT558 Zet N SOT23 pnp 400V 0.15A  
**589** FMMT589 Zet N SOT23 pnp 30V 1A  
**591** FMMT591 Zet N SOT23 ZTX550/551  
**593** FMMT593 Zet N SOT23 ZTX 553  
**5A** BC807-16 Phi N SOT23 BC327-16  
**5As** BC807-16 Sie N SOT23 BC327-16  
**5As** BC807-16W Sie N SOT323 BC327-16  
**5Ap** BC807-16 Phi N SOT23 BC327-16  
**5At** BC807-16 Phi N SOT23 BC327-16  
**5At** BC807-16W Phi N SOT323 BC327-16  
**5A-** BC807-16W Phi N SOT323 BC327-16  
**5A** BSS123 Mot M SOT23 n-ch tmosfet Vds 100V  
**5A** MMBD6050 Mot C SOT23 sw diode 70V 0.2A  
**5A** FMMD6050 Zet C SOT23 sw diode 70V 100mA  
**5A1** PZM5.1NB2A Phi A SOT346 dual ca 5.1V 0.3W zener  
**5A6** PZM5.6NB2A Phi A SOT346 dual ca 5.6V 0.3W zener  
**5AR** BC807-16R Phi R SOT23R BC327-16  
**5B** MMBT4123 Mot N SOT23 2N4123  
**5B** BC807-25 SGS N SOT23 BC327-25  
**5Bs** BC807-25 Sie N SOT23 BC327-25  
**5Bs** BC807-25W Sie N SOT323 BC327-25  
**5Bs** BC807-25U Sie N SC74 BC327-25  
**5Bp** BC807-25 Phi N SOT23 BC327-25  
**5Bt** BC807-25 Phi N SOT23 BC327-25  
**5Bt** BC807-25W Phi N SOT323 BC327-25  
**5B-** BC807-25W Phi N SOT323 BC327-25  
**5B** MMBD6100 Mot B SOT23 cc dual diode 70V 0.2A  
**5B** FMMD6100 Zet B SOT23 cc dual diode 70V 0.2A  
**5BM** MMBD6100 Mot B SOT23 cc dual diode 70V 0.2A  
**5BR** BC807-25R Phi R SOT23R BC327-25  
**5C** BC807-40 SGS N SOT23 BC327-40  
**5Cs** BC807-40 Sie N SOT23 BC327-40  
**5Cs** BC807-40W Sie N SOT323 BC327-40  
**5Cp** BC807-40 Phi N SOT23 BC327-40  
**5Ct** BC807-40 Phi N SOT23 BC327-40  
**5Ct** BC807-40W Phi N SOT323 BC327-40  
**5C-** BC807-40W Phi N SOT323 BC327-40  
**5C** MMBD7000 Mot D SOT23 2 ser diodes 100V 0.2A  
**5C** FMMD7000 Zet D SOT23 2 ser diodes 70V 200mA  
**5CR** BC807-40R Phi R SOT23E BC327-40  
**5D** FMMD914 Zet C SOT23 1N914  
**5D** MMBD914 Mot C SOT23 1N914  
**5D** MMSD914 Mot I SOD123 1N914  
**5D** HD2A Zet B dual cc HD2 75V 100mA  
**5Dp** BC807 Phi N SOT23 BC327  
**5Dt** BC807 Phi N SOT23 BC327  
**5Dt** BC807W Phi N SOT323 BC327  
**5D-** BC807W Phi N SOT323 BC327  
**5E** BC808-16 Phi N SOT23 BC328-16  
**5Es** BC808-16 Sie N SOT23 BC328-16  
**5Es** BC808-16W Sie N SOT323 BC328-16  
**5E** FMMT-A43R Zet R SOT23R MPSA43  
**5E** BC808-16 Phi N SOT23 BC328-16  
**5ER** BC808-16R Phi R SOT23R BC328-16  
**5F** BC808-25 Phi N SOT23 BC328-25  
**5Fs** BC808-25 Sie N SOT23 BC328-25  
**5Fs** BC808-25W Sie N SOT323 BC328-25  
**5F** MMBD501 Mot C SOT23 MBD501 hot carrier diode  
**5F** Gali-5F MC AZ SOT89 DC-4GHz MMIC amp 20 dB gain  
**5FR** BC808-25R Phi R SOT23R BC328-25  
**5G** BC808-40 Phi N SOT23 BC328-40  
**5Gs** BC808-40 Sie N SOT23 BC328-40

**5Gs** BC808-40W Sie N SOT323 BC328-40  
**5G** MMBD353 Mot D dual series MBD101  
**5GR** BC808-40R Phi R SOT23R BC328-40  
**5H** MMBD701 Mot C SOT23 MBD701 UHF schottky diode  
**5Hp** BC808 Phi N SOT23 BC328  
**5HZ** BC808 Zet N SOT23 BC328  
**5H** MMBD4148 Nat C SOT23 1N4148  
**5I** MMSD4148 Mot C 1N4148  
**5J** FMMT38B Zet N BCX38B  
**5K** MMBV809 Mot C SOT23 Hyperabrupt varicap  
**5Kp** BAP64-05 Phi B dual cc 3GHz RF pin diode  
**5L** MMBV609 Mot B SOT23 dual cc Hyperabrupt varicap  
**5N** MMBD452L Mot D SOT23 series UHF schottky diodes  
**5P** FMMT2907AR Zet R SOT23R 2N2907A  
**5T** BCW66GR Sie R SOT23R npn 45V 0.8A 350mW  
**5V** BCW65BR Zet R SOT23R npn 32V 0.8A  
**5V1** PZM5.1NB Phi C SOT346 5.1V 0.3W zener  
**5V6** PZM5.6NB Phi C SOT346 5.6V 0.3W zener  
**5W** BCW67BR Zet R SOT23R pnp 32V 0.8A  
**5Y1** BZV49-C5V1 Phi O SOT89 5.1V 1W zener  
**5Y6** BZV49-C5V6 Phi O SOT89 5.6V 1W zener

### Codes beginning with '6'

#### Code Device Manufacturer Base Package Leaded Equivalent/Data

**6 (red)** BBY56-03W Sie I SOD323 varicap  
**60s** BAR60 Sie QQ SOT143 3 pin diodes  
**605** NDS0605 Fch M SOT23 P-ch mosfet 60V 180mA  
**61s** BAR61 Sie PQ SOT143 3 pin diodes pi atten  
**61A** MMBF4117 Nat F - n-ch jfet ultra low i/p Ig  
**61C** MMBF4118 Nat F - n-ch jfet ultra low i/p Ig  
**61A** MMBF4119 Nat F - n-ch jfet ultra low i/p Ig  
**61J** MMBF4091 Nat F - n-ch jfet sw/chopper  
**61K** MMBF4092 Nat F - n-ch jfet sw/chopper  
**61L** MMBF4093 Nat F - n-ch jfet sw/chopper  
**61M** MMBF4859 Nat F - n-ch jfet sw/chopper  
**61N** MMBF5514 Nat F - p-ch jfet sw/chopper  
**61P** MMBF5115 Nat F - p-ch jfet sw/chopper  
**61Q** MMBF5516 Nat F - p-ch jfet sw/chopper  
**61S** MMBF5458 Nat F - n-ch jfet gp 2N5458  
**61T** MMBF5459 Nat F - n-ch jfet gp 2N5459  
**61U** MMBF5461 Nat F - p-ch jfet gp 2N5461  
**61V** MMBF5462 Nat F - p-ch jfet gp 2N5462  
**62** DTC123YE Roh N EMT3 npn dtr 2k2 +10k 50V 100mA  
**62** DTC123YUA Roh N SC70 npn dtr 2k2 +10k 50V 100mA  
**62** DTC123YKA Roh N SC59 npn dtr 2k2 +10k 50V 100mA  
**62P** MMBFJ201 Nat F - n-ch jfet gp J201  
**62Q** MMBFJ202 Nat F - n-ch jfet gp J202  
**62R** MMBFJ203 Nat F - n-ch jfet gp J203  
**62S** MMBFJ270 Nat F - p-ch jfet gp J270  
**62T** MMBFJ271 Nat F - p-ch jfet gp J271  
**62V** PZM62NB1 Phi C SOT346 62V 0.3W zener  
**62Y** BZV49-C62 Phi O SOT89 62V 1W zener  
**63s** BAT64 Sie C SOT23 Schottky 40V 250mA gp  
**63s** BAT64W Sie C SOT323 Schottky 40V 250mA gp  
**63Q** MMBFJ304 Nat F - n-ch jfet vhf J304  
**64** DTC114YE Roh N EMT3 npn dtr 10k + 47k 50V 100mA  
**64** DTC114YUA Roh N SC70 npn dtr 10k + 47k 50V 100mA  
**64** DTC114YKA Roh N SC59 npn dtr 10k + 47k 50V 100mA  
**64s** BAT64-04 Sie D SOT23 dual ser gp Schottky 40V 250mA  
**64s** BAT64-04W Sie D SOT323 dual ser gp Schottky 40V 250mA  
**65s** BAT64-05 Sie B SOT23 dual cc gp Schottky 40V 250mA  
**65s** BAT64-05W Sie B SOT323 dual cc gp Schottky 40V 250mA  
**66s** BAT64-06 Sie A SOT23 dual ca gp Schottky 40V 250mA  
**66s** BAT64-06W Sie A SOT323 dual ca gp Schottky 40V 250mA  
**67s** BAT64-07 Sie S SOT143 dual gp Schottky 40V 250mA  
**67s** BAT64-07W Sie S SOT343 dual gp Schottky 40V 250mA  
**67** BFP67 Tfk X - npn Rf ft 7.5GHz 10V 50mA  
**67R** BFP67R Tfk WQ - npn Rf ft 7.5GHz 10V 50mA  
**68Y** BZV49-C68 Phi O SOT89 68V 1W zener  
**68V** PZM68NB1 Phi C SOT346 68V 0.3W zener  
**69** DTA114YE Mot N SOT416 pnp dtr 10k +47k

69 DTC115EE Roh N EMT3 npn dtr 100k+100k 50V 20mA  
69 DTC115EUA Roh N SC70 npn dtr 100k+100k 50V 20mA  
69 DTC115EKA Roh N SC59 npn dtr 100k+100k 50V 20mA  
605 NDS0605 Fch M - p-ch sw mosfet 60V  
610 NDS0610 Fch M - p-ch sw mosfet 60V  
614 FMMT614 Zet N SOT23 sw  
617 FMMT617 Zet N SOT23 npn sw 15V 3A  
618 FMMT618 Zet N SOT23 npn sw 20V 2.5A  
619 FMMT619 Zet N SOT23 npn sw 50V 2A  
621 PZM6.2NB1 Phi C SOT346 6.2V 0.3W zener  
622 PZM6.2NB2 Phi C SOT346 6.2V 0.3W zener  
623 PZM6.2NB3 Phi C SOT346 6.2V 0.3W zener  
624 FMMT624 Zet N SOT23 -  
625 FMMT625 Zet N SOT23 -  
634 FMMT634 Zet N SOT23 100V 0.9A darlington npn  
651 PZT651 Mot N SOT223 npn 60V 1A  
681 PZM6.8NB1 Phi C SOT346 6.8V 0.3W zener  
682 PZM6.8NB2 Phi C SOT346 6.8V 0.3W zener  
683 PZM6.8NB1 Phi C SOT346 6.8V 0.3W zener  
6A MMBF4416 Mot F SOT23 2N4416 n-ch vhf jfet  
6A MUN2111 Mot N SOT23 pnp dtr with 10k+10k  
6A MUN5111 Mot N SOT323 pnp dtr with 10k+10k  
6A BC817-16 Phi N SOT23 BC337-16  
6As BC817-16 Sie N SOT23 BC337-16  
6As BC817-16 Sie N SOT323 BC337-16  
6Ap BC817-16W Phi N SOT23 BC337-16  
6At BC817-16 Phi N SOT23 BC337-16  
6At BC817-16W Phi N SOT323 BC337-16  
6A- BC817-16W Phi N SOT323 BC337-16  
6A2 PZM6.2NB2A Phi A SOT346 dual ca 6.2V 0.3W zener  
6A8 PZM6.8NB2A Phi A SOT346 dual ca 6.8V 0.3W zener  
6AR BC817-16R Phi R SOT23 BC337-16  
6AZ BC817-16 Zet N SOT23 BC337-16  
6B MMBF5484 Mot F SOT23 n-ch jfet 2N5484  
6B BC817-25 Phi N SOT23 BC337-25  
6Bs BC817-25 Sie N SOT23 BC337-25  
6Bs BC817-25W Sie N SOT323 BC337-25  
6Bp BC817-25 Phi N SOT23 BC337-25  
6Bt BC817-25 Phi N SOT23 BC337-25  
6Bt BC817-25W Phi N SOT323 BC337-25  
6B- BC817-25W Phi N SOT323 BC337-25  
6B MUN2112 Mot N SOT23 pnp dtr 22k+22k  
6B MUN5112 Mot N SOT323 MUN2112  
6BR BC817-25R Phi R SOT23R BC337-25  
6BZ BC817-25 Zet N SOT23 BC337-25  
6C BC817-40 Phi N SOT23 BC337-40  
6Cs BC817-40 Sie N SOT23 BC337-40  
6Cs BC817-40W Sie N SOT323 BC337-40  
6Cp BC817-40 Phi N SOT23 BC337-40  
6Ct BC817-40 Phi N SOT23 BC337-40  
6Ct BC817-40W Phi N SOT323 BC337-40  
6C- BC817-40W Phi N SOT323 BC337-40  
6C MMBFU310 Mot F SOT23 n-ch jfet U310  
6C MUN2113 Mot N SOT23 pnp dtr 47k+47k  
6C MUN5113 Mot N SOT323 MUN2113  
6CR BC817-40R Phi R SOT23R BC337-40  
6CZ BC817-40 Zet N SOT23 BC337-40  
6Dp BC817 Phi N SOT23 BC337  
6Dt BC817 Phi N SOT23 BC337  
6Dt BC817W Phi N SOT323 BC337  
6D- BC817W Phi N SOT323 BC337  
6D MMBF5457 Mot F SOT23 2N5457 n-ch jfet  
6D MUN2114 Mot N SOT23 pnp dtr 10k+47k  
6D MUN5114 Mot N SOT323 MUN2114  
6DZ BC817 Zet N SOT23 BC337  
6E FMMT-A93R Zet R SOT23R MPSA93  
6E MMBF5460 Mot F SOT23 p-ch jfet 2N5460  
6E BC818-16 Phi N SOT23 BC338-16  
6Es BC818-16 Sie N SOT23 BC338-16  
6Es BC818-16W Sie N SOT323 BC338-16

**6E** MUN2115 Mot N SOT23 pnp dtr R1 10k  
**6E** MUN5115 Mot N SOT323 MUN2115  
**6ER** BC818-16R Phi R SOT23 BC338-16  
**6EZ** BC818-16 Zet N SOT23 BC338-16  
**6F** MMBF4860 Mot F SOT23 2N4860 n-ch jfet  
**6F** BC818-25 Phi N SOT23 BC338-25  
**6Fs** BC818-25 Sie N SOT23 BC338-25  
**6Fs** BC818-25W Sie N SOT323 BC338-25  
**6F** MUN2116 Mot N SOT23 pnp dtr R1 4k7  
**6F** MUN5116 Mot N SOT323 MUN2116  
**6F** Gali-6F MC AZ SOT89 DC-4GHz MMIC amp 12 dB gain  
**6FR** BC818-25R Phi R SOT23R BC338-25  
**6FZ** BC818-25 Zet N SOT23 BC338-25  
**6G** BC818-40 Phi N SOT23 BC338-40  
**6Gs** BC818-40 Sie N SOT23 BC338-40  
**6Gs** BC818-40W Sie N SOT323 BC338-40  
**6G** MMBF4393 Mot F SOT23 n-ch jfet 2N4393  
**6G** MUN2130 Mot N SOT23 pnp dtr 1k0+1k0  
**6G** MUN5130 Mot N SOT323 ial">MUN2130  
**6GR** BC818-40R Phi R SOT23 BC338-40  
**6GZ** BC818-40 Zet N SOT23 BC338-40  
**p6G** PMBF4393 Phi F SOT23 n-ch jfet 2N4393  
**6Hp** BC818 Phi N SOT23 BC338  
**6HZ** BC818 Zet N SOT23 BC338  
**6H** MMBF5486 Mot F SOT23 n-ch jfet 2N5486  
**6H** MUN2131 Mot N SOT23 pnp dtr 2k2 +2k2  
**6H** MUN5131 Mot N SOT323 MUN2121  
**6J** MMBF4391 Mot F SOT23 n-ch jfet 2N4391  
**6J** MUN2132 Mot N SOT23 pnp dtr 4k7+ 4k7  
**6J** MUN5132 Mot N SOT323 MUN2132  
**p6J** MMBF4391 Phi F SOT23 n-ch jfet 2N4391  
**6K** MMBF4932 Mot F SOT23 n-ch jfet 2N4932  
**6K** MUN2133 Mot N SOT23 pnp dtr 4k7+ 47k  
**6K** MUN5133 Mot N SOT323 MUN2133  
**p6K** MMBF4932 Phi F SOT23 n-ch jfet 2N4932  
**6L** MMBF5459 Mot F SOT23 n-ch jfet 2N5459  
**6L** MUN2134 Mot N SOT23 pnp dtr 22k+47k  
**6L** MUN5134 Mot N SOT323 MUN2134  
**6M** MMBF5485 Nat F SOT23 n-ch jfet vhf 2N5485  
**6N** MMBF4861 Nat F SOT23 n-ch jfet sw/chopper  
**6Q** MMBFJ305 Nat F - n-chjfet vhf J305  
**6P** MMBFJ111 Nat F - J111 n-ch jfet  
**6P** BCX71HR Phi R SOT23R BCX79  
**6R** MMBFJ112 Nat F - J112 n-chjfet  
**6P** MMBFJ113 Nat F - J113 n-ch jfet  
**6S** MMBFJ176 Nat F - J176 n-ch jfet  
**6S** MMSD71 Mot C - gp Si diode  
**p6S** PMBFJ176 Phi F - J176 n-ch jfet  
**6T** BCW68GR Sie R - pnp 45V 0.8A 350mW  
**6T** MMBFJ310 Mot F SOT23 uhf n-ch jfet J310  
**6U** MMBFJ309 Nat F SOT23 uhf n-ch jfet J309  
**6V** BCW65CR Zet R SOT23R npn 32V 0.8A  
**6V** MMBFJ174 Nat F - J174 p-ch jfet sw/chopper  
**6V2** PZM6.2NB Phi C SOT346 6.2V 0.3W zener  
**6V8** PZM6.8NB Phi C SOT346 6.8V 0.3W zener  
**6W** BCW67CR Zet R SOT23R pnp32V 0.8A  
**6W** MMBFJ175 Mot F SOT23 J175 p-ch jfet  
**p6W** PMBFJ175 Phi F SOT23 J175 p-ch jfet  
**6X** MMBFJ174 Nat F - J174 p-ch jfet sw/chopper  
**p6X** PMBFJ174 Phi F - J174 p-ch jfet sw/chopper  
**6Y** MMBFJ177 Mot F SOT23 J177 p-ch jfet  
**p6Y** PMBFJ177 Phi F SOT23 J177 p-ch jfet  
**6Y2** BZV49-C6V2 Phi O SOT89 6.2V 1W zener  
**6Y8** BZV49-C6V8 Phi O SOT89 6.8V 1W zener  
**6Z** MMBF170 Mot M SOT23 tmosfet n-ch Vds 60V

## Codes beginning with '7'

**Code Device Manufacturer Base Package Leaded Equivalent/Data**

**7 (white)** BBY55-02W Sie I SCD80 UHF Varicap  
**70** BFQ70 Sie CX SOT173 npn fT 5.2GHz 15V 35mA  
**71** BFQ71 Sie CX SOT173 npn fT 5.2GHz 15V 30mA

**72** BFQ72 Sie CX SOT173 npn fT 5.1GHz 15V 50mA  
**72** 2N7002 Sil M SOT23 n-ch mosfet 60V 170mA  
**73s** BAS70 Sie C SOT23 schottky diode 70V 50mA  
**73p** BAS70 Phi C SOT23 schottky diode 70V 50mA  
**73t** BAS70 Phi C SOT23 schottky diode 70V 50mA  
**73t** BAS70W Phi C SOT323 schottky diode 70V 50mA  
**73-** BAS70W Phi C SOT323 schottky diode 70V 50mA  
**73** MA4CS101A M/A C SOT23 schottky diode 70V 50mA  
**73** BFQ73 Sie CX SOT173 npn fT 4.9GHz 15V 75mA  
**73** 2SC5004 Nec N - npn RF 5GHz @5V 5mA  
**73S** BFQ73S Sie CX SOT173 npn fT 5.3GHz 15V 100mA  
**74** BFQ74 Sie CX SOT173 npn fT 6GHz 16V 35mA  
**74s** BAS70-04 Sie D SOT23 dual series BAS70  
**74p** BAS70-04 Phi D SOT23 dual series BAS70  
**74t** BAS70-04 Phi D SOT23 dual series BAS70  
**74t** BAS70-04W Phi D SOT323 dual series BAS70  
**74t** BAS70-04W Phi D SOT323 dual series BAS70  
**74** MA4CS101B M/A D SOT23 dual series MA4CS101A (73)  
**74** DTA114WE Rho N EMT3 pnp dtr 10k + 4k7 50V 100mA  
**74** DTA114WUA Rho N SC70 pnp dtr 10k + 4k7 50V 100mA  
**74** DTA114WKA Rho N SC59 pnp dtr 10k + 4k7 50V 100mA  
**74** 2SC5005 Nec N - npn RF 5.5GHz @5V 5mA  
**75s** BAS70-05 Sie B SOT23 dual cc BAS70  
**75s** BAS70-05W Sie B SOT323 dual cc BAS70  
**75p** BAS70-05 Phi B SOT23 dual cc BAS70  
**75t** BAS70-05W Phi B SOT323 dual cc BAS70  
**75t** BAS70-05 Phi B SOT23 dual cc BAS70  
**75-** BAS70-05W Phi B SOT323 dual cc BAS70  
**75** BFQ75 Sie CX SOT173 pnp fT 5GHz 12V 50mA  
**75Y** BZV49-C75 Phi O SOT89 75V 1W zener  
**76s** BAS70-06 Sie A SOT23 dual ca BAS70  
**76p** BAS70-06 Phi A SOT23 dual ca BAS70  
**76t** BAS70-06 Phi A SOT23 dual ca BAS70  
**76t** BAS70-06W Phi A SOT323 dual ca BAS70  
**76-** BAS70-06W Phi A SOT323 dual ca BAS70  
**76** BFQ76 Sie CX SOT173 pnp fT 5GHz 15V 30mA  
**76** DTA144WE Rho N EMT3 pnp dtr 47k + 22k 50V 30mA  
**76** DTA144WUA Rho N SC70 pnp dtr 47k + 22k 50V 30mA  
**76** DTA144WKA Rho N SC59 pnp dtr 47k + 22k 50V 30mA  
**77s** BAS70-07 Sie S SOT143 dual BAS70  
**77s** BAS70-07 Sie S SOT343 dual BAS70  
**77** MA4CS101E M/A S SOT143 dual MA4CS101A (73)  
**77** BFQ77 Sie CX SOT173 npn fT 7GHz 15V 20mA  
**78** MMBT4258 Nat N SOT23 pnp sw fT 700MHz  
**701** 2N7001 Mot M SOT23 n-ch mosfet  
**702** 2N7002 Mot M SOT23 n-ch mosfet 60V 0.11A  
**703** 2N7003 Mot M SOT23 n-ch mosfet  
**712** NDS7002A Nat M SOT23 n-ch mosfet 60V 0.28A  
**717** FM7T1717 Zet N SOT23 pnp sw 0.625W 2.5A 12V  
**718** FM7T1718 Zet N SOT23 pnp sw 0.625W 1.5A 20V  
**720** FM7T1720 Zet N SOT23 pnp sw 0.625W 1.5A  
**722** FM7T1722 Zet N SOT23 pnp sw  
**723** FM7T1723 Zet N SOT23 pnp sw  
**751** PZM7.5NB1 Phi C SOT346 7.5V 0.3W zener  
**752** PZM7.5NB2 Phi C SOT346 7.5V 0.3W zener  
**753** PZM7.5NB3 Phi C SOT346 7.5V 0.3W zener  
**7A** MMBR901 Mot N SOT23 npn RF MRF901  
**7A** MUN5211DW1 Mot DN SOT363 dual npn dtr 10k+10k  
**7A5** PZM7.5NB2A Phi A SOT346 dual ca 7.5V 0.3W zener  
**7B** MMBR920 Mot N SOT23 npn RF ?MRF920  
**7B** MUN5212DW1 Mot DN SOT363 dual npn dtr 22k+22k  
**7C** MMBR930 Mot N SOT23 npn RF ?MRF930  
**7C** MUN5213DW1 Mot DN SOT363 dual npn dtr 47k+47k  
**7D** MMBR931 Mot N SOT23 npn RF ?MRF931  
**7D** HD4A Zet A - ca dual HD3A  
**7D** MUN5214DW1 Mot DN SOT363 dual npn dtr 10k+47k  
**7E** FM7T1742R Zet R - MPSA42  
**7E** MMBR2060 Mot N - npn RF fT 1GHz Vce 30V 50mA  
**7E** MUN5215DW1 Mot DN SOT363 dual npn 10k base res  
**7F** MMBR4957 Mot N - npn RF fT 1.2GHz 30V 30mA

**7F** MUN5211DW1 Mot DN SOT363 dual npn dtr R1 4k7  
**7G** MMBR5031 Mot N SOT23 npn RF fT 1GHz 10V 20mA  
**7G** MUN5230DW1 Mot DN SOT363 dual npn dtr 1k0+1k0  
**7H** MMBR5179 Mot N SOT23 npn RF 2N5179/BFY90  
**7H** MUN5231DW1 Mot DN SOT363 dual npn dtr 2k2+2k2  
**7J** FMMT38C Zet N SOT23 BCX38C  
**7J** MUN5232DW1 Mot DN SOT363 dual npn dtr 4k7+4k7  
**7K** MMBR2857 Mot N - npn RF fT 1GHz Vce 15V 40mA  
**7K** MUN5233DW1 Mot DN SOT363 dual npn dtr 4k7+47k bias  
**7L** MUN5234DW1 Mot DN SOT3636 dual npn dtr 22k+47k bias  
**7M** MUN5235DW1 Mot DN SOT363 dual npn dtr 2k2+47k bias  
**7M** MMBR521L Mot N SOT23 pnp RF MRF521  
**7M** BCW66HR Zet R SOT23R npn 45V 0.8A  
**7N** MMBR941BL Mot N SOT23 npn RF fT 8GHz MRF941  
**7N** BCW68HR Zet R SOT23 pnp 45V 0.8A  
**7P** BCW66FR SGS R SOT23R npn 45V 0.8A 350mW  
**7P** MMBR911L Mot N SOT23 npn RF fT 6GHz MRF911  
**7R** MMBR536 Mot N - npn RF MRF536  
**7T** BCW68FR Zet R SOT23R pnp 45V 0.8A  
**7V5** PZM7.5NB Phi C SOT346 7.5V 0.3W zener  
**7X** MMBR571L Mot N SOT23 npn RF fT 8GHz MRF571  
**7Y** MMBR941L Mot N SOT23 npn RF fT 8GHz MRF941  
**7Y5** BZV49-C7V5 Phi O SOT89 7.5V 1W zener  
**7Z** MMBR951L Mot N SOT23 npn RF fT 7.5GHz MRF951

## Codes beginning with '8'

### Code Device Manufacturer Base Package Leaded Equivalent/Data

**8 (yellow)** BBY58-03W Sie I SOD323 varicap  
**81** ZMV831BV2 Zet I SOD523 28V hyperabrupt varicap 15pF @2V  
**81A** MMBZ5250B Mot C SOT23 20V zener 0.225W  
**81A** PMBZ5250B Phi C SOT23 20V zener 0.225W  
**81B** MMBZ5251B Mot C SOT23 22V zener 0.225W  
**81B** PMBZ5251B Phi C SOT23 22V zener 0.225W  
**81C** MMBZ5252B Mot C SOT23 24V zener 0.225W  
**81C** PMBZ5252B Phi C SOT23 24V zener 0.225W  
**81D** MMBZ5253B Mot C SOT23 25V zener 0.225W  
**81D** PMBZ5253B Phi C SOT23 25V zener 0.225W  
**81E** MMBZ5254B Mot C SOT23 27V zener 0.225W  
**81E** PMBZ5254B Mot C SOT23 27V zener 0.225W  
**81F** MMBZ5255B Mot C SOT23 28V zener 0.225W  
**81F** PMBZ5255B Sie C SOT23 28V zener 0.225W  
**81G** MMBZ5256B Mot C SOT23 30V zener 0.225W  
**81G** PMBZ5256B Phi C SOT23 30V zener 0.225W  
**81H** MMBZ5257B Mot C SOT23 33V zener 0.225W  
**81H** PMBZ5257B Phi C SOT23 33V zener 0.225W  
**82** 2SC5009 Nec N - npn RF fT 12GHz @ 3V 5mA  
**82** ZMV832BV2 Zet I SOD523 28V hyperabrupt varicap 22pF @2V  
**82P** BFP182T Tfk X - npn RF fT 7.5GHz 10V 35mA  
**83** MMBT4400 Nat N - npn 2N4400  
**83s** BAT68 Sie C SOT23 gp Schottky 8V 130mA  
**83s** BAT68W Sie C SOT323 gp Schottky 8V 130mA  
**83** 2SC5010 Nec N - npn RF fT 12GHz 3V 10mA  
**83** MA4CS102A M/A C SOT23 schottky diode 8V 30mA  
**83P** BFP183T Tfk X - npn RF fT 7.4GHz 10V 65mA  
**84s** BAT68-04 Sie D SOT23 dual ser gp Schottky 8V 130mA  
**84s** BAT68-04W Sie D SOT323 dual ser gp Schottky 8V 130mA  
**84** MA4CS102B M/A D SOT23 dual ser schottky diode 8V 30mA  
**84** DTC114WE Rho N EMT3 npn dtr 10k + 4k7 50V 100mA  
**84** DTC114WUA Rho N SC70 npn dtr 10k + 4k7 50V 100mA  
**84** DTC114WKA Rho N SC59 npn dtr 10k + 4k7 50V 100mA  
**85** MMBD1701 Nat C - Fast Si diode 30V 50mA  
**85** MA4CS102A M/A B SOT23 dual cc schottky diode 8V 30mA  
**85s** BAT68-05 Sie B SOT23 gp dual cc Schottky 8V 130mA  
**85s** BAT68-05W Sie B SOT323 gp dual cc Schottky 8V 130mA  
**86** MMBD1702 Nat K - Fast Si diode 30V 50mA  
**86** DTC144WE Rho N EMT3 npn dtr 47k + 22k 50V 30mA  
**86** DTC144WUA Rho N SC70 npn dtr 47k + 22k 50V 30mA  
**86** DTC144WKA Rho N SC59 npn dtr 47k + 22k 50V 30mA  
**86s** BAT68-06 Sie A SOT23 gp dual ca Schottky 8V 130mA  
**86s** BAT68-06W Sie A SOT323 gp dual ca Schottky 8V 130mA  
**87** MMBD1703 Nat D - dual ser MMBD1701

87 MA4CS102A M/A S SOT143 dual schottky diode 8V 30mA  
87s BAT68-07 Sie S SOT143 gp dual schottky 8V 130mA  
88 MMBD1704 Nat B - dual cc MMBD1701  
89 MMBD1705 Nat A - dual ca MMBD1701  
821 PZM8.2NB1 Phi C SOT23 8.2V 0.3W zener  
822 PZM8.2NB2 Phi C SOT23 8.2V 0.3W zener  
822 S822T Tfk X - npn RF ft 5.2GHz 6V 8mA  
823 PZM8.2NB3 Phi C SOT23 8.2V 0.3W zener  
852 S852T Tfk N SOT23 npn RF ft 5.2GHz 6V 8mA  
887 S887T Tfk W SOT143 n-ch dg uhf mosfet  
888 S888T Tfk W SOT142 n-ch dg uhf mosfet  
8A NJM78L02A NJR KQ SOT89 78L 2.0V 0.1A regulator  
8A MMBZ5226B Mot C SOT23 3.3V zener 0.225W  
8A MUN2211 Mot N SOT23 npn dtr 10k +10k  
8A MUN5211 Mot N SOT323 npn dtr 10k +10k  
8A2 PZM8.2NB2A Phi C SOT23 dual ca 8.2V 0.3W zener  
8B NJM78L03A NJR KQ SOT89 78L 3.0V 0.1A regulator  
8B MMBZ5227B Mot C SOT23 3.6V zener 0.225W  
8B MUN2212 Mot N SOT23 npn dtr 22k+22k  
8B MUN5212 Mot N SOT323 npn dtr 22k+22k  
8C NJM78L05A NJR KQ SOT89 78L 5.0V 0.1A regulator  
8C MMBZ5228B Mot C SOT23 3.9V zener 0.225W  
8C MUN2213 Mot N SOT23 npn dtr 47k + 47k  
8C MUN5213 Mot N SOT323 npn dtr 47k + 47k  
8D MUN2214 Mot N SOT23 npn dtr 10k + 47k  
8D MUN5214 Mot N SOT323 MUN2214  
8E NJM78L06A NJR KQ SOT89 78L 6.0V 0.1A regulator  
8E FMMT-A92R Zet R SOT23R MP9A92  
8E MMBZ5230B Mot C SOT23 4.7V zener 0.225W  
8E MUN2215 Mot N SOT23 npn dtr R1 10k  
8E MUN5215 Mot N SOT323 npn dtr R1 10k  
8F NJM78L07A NJR KQ SOT89 78L 7.0V 0.1A regulator  
8F MMBZ5231B Mot C SOT23 5.1V zener 0.225W  
8F MUN2216 Mot N SOT23 npn dtr R1 4k7  
8F MUN5216 Mot N SOT323 MUN2216  
8G NJM78L08A NJR KQ SOT89 78L 8.0V 0.1A regulator  
8G MMBZ5232B Mot C SOT23 5.6V zener 0.225W  
8G MUN2230 Mot N SOT23 npn dtr 1k0+1k0  
8G MUN5230 Mot N SOT323 npn dtr 1k0+1k0  
8H NJM78L09A NJR KQ SOT89 78L 9.0V 0.1A regulator  
8H MMBZ5233B Mot C SOT23 6.0V zener 0.225W  
8H MUN2231 Mot N SOT23 npn dtr 2k2+2k2  
8H MUN5231 Mot N SOT323 npn dtr 2k2+2k2  
8J NJM78L10A NJR KQ SOT89 78L 10V 0.1A regulator  
8J MMBZ5234B Mot C SOT23 6.2V zener 0.225W  
8J MUN2232 Mot N SOT23 npn dtr 4k7+ 4k7  
8J MUN5232 Mot N SOT323 npn dtr 4k7+ 4k7  
8K NJM78L12A NJR KQ SOT89 78L 12V 0.1A regulator  
8K MMBZ5235B Mot C SOT23 6.8V zener 0.225W  
8K MUN2233 Mot N SOT23 npn dtr 4k7+ 47k  
8K MUN5233 Mot N SOT323 npn dtr 4k7+ 47k  
8L NJM78L15A NJR KQ SOT89 78L 15V 0.1A regulator  
8L MMBZ5236B Mot C SOT23 7.5V zener 0.225W  
8L MUN2234 Mot N SOT23 npn dtr 22k + 47k  
8L MUN5234 Mot N SOT323 npn dtr 22k + 47k  
8M NJM78L18A NJR KQ SOT89 78L 18V 0.1A regulator  
8M MMBZ5237B Mot C SOT23 8.2V zener 0.225W  
8N NJM78L20A NJR KQ SOT89 78L 20V 0.1A regulator  
8N MMBZ5238B Mot C SOT23 8.7V zener 0.225W  
8P NJM78L24A NJR KQ SOT89 78L 24V 0.1A regulator  
8P MMBZ5239B Mot C SOT23 9.1V zener 0.225W  
8Q MMBZ5240B Mot C SOT23 10V zener 0.225W  
8R MMBZ5241B Mot C SOT23 11V zener 0.225W  
8S MMBZ5242B Mot C SOT23 12V zener 0.225W  
8T MMBZ5243B Mot C SOT23 13V zener 0.225W  
8U MMBZ5244B Mot C SOT23 14V zener 0.225W  
8V MMBZ5245B Mot C SOT23 15V zener 0.225W  
8V2 PZM8.2NB Phi C SOT23 8.2V 0.3W zener  
8W MMBZ5246B Mot C SOT23 16V zener 0.225W  
8X MMBZ5247B Mot C SOT23 17V zener 0.225W

8Y MMBZ5248B Mot C SOT23 18V zener 0.225W  
8Y2 BZV49-C8V2 Phi O SOT89 8.2V 1W zener  
8Z NJM78L62A NJR KQ SOT89 78L 6.2V 0.1A regulator  
8Z MMBZ5249B Mot C SOT23 19V zener 0.225W

### Codes beginning with '9'

**Code Device Manufacturer Base Package Leaded Equivalent/Data**

9 BC849 Mot N SOT23 BC 549B  
91 ZV931V2 Zet I SOD523 4-13.5pF hyperabrupt varicap  
91 DTA113TKA Roh N SC59 pnp dtr R1 1k0 50V 100mA  
91A FMMT591A Zet N SOT23 pnp 40V 1A 0.5W fT 150 MHz  
92 ZV932V2 Zet I SOD523 5.5-17pF hyperabrupt varicap  
92V BFP92A Tik W - npn RF 6GHz 16V 30mA  
93 ZV933V2 Zet I SOD523 12-42pF hyperabrupt varicap  
93 DTA143TE Roh N EMT3 pnp dtr R1 4k7 50V 100mA  
93 DTA143TUA Roh N SC70 pnp dtr R1 4k7 50V 100mA  
93 DTA143TKA Roh N SC59 pnp dtr R1 4k7 50V 100mA  
94 DTA114TE Roh N EMT3 pnp dtr R1 10k 50V 100mA  
94 DTA114TUA Roh N SC70 pnp dtr R1 10k 50V 100mA  
94 DTA114TKA Roh N SC59 pnp dtr R1 10k 50V 100mA  
95 DTA124TE Roh N EMT3 pnp dtr R1 22k 50V 100mA  
95 DTA124TCA Roh N SOT23 pnp dtr R1 22k 50V 100mA  
95 DTA124TKA Roh N SC59 pnp dtr R1 22k 50V 100mA  
96 DTA144TE Roh N EMT3 pnp dtr R1 47k 50V 100mA  
96 DTA144TUA Roh N SC70 pnp dtr R1 47k 50V 100mA  
96 DTA144TKA Roh N SC59 pnp dtr R1 47k 50V 100mA  
99 DTA115TE Roh N EMT3 pnp dtr R1 100k 50V 100mA  
99 DTA115TUA Roh N SC70 pnp dtr R1 100k 50V 100mA  
99 DTA115TKA Roh N SC59 pnp dtr R1 100k 50V 100mA  
911 PZM9.1NB1 Phi C SOT346 9.1V 0.3W zener  
912 PZM9.1NB2 Phi C SOT346 9.1V 0.3W zener  
913 PZM9.1NB3 Phi C SOT346 9.1V 0.3W zener  
9A FMMT2369AR Zet R SOT23 2N2369A  
9A DTA125TUA Roh N SC70 pnp dtr R1 200k 50V 100mA  
9A DTA125TKA Roh N SC59 pnp dtr R1 200k 50V 100mA  
9A PLVA650A Phi C SOT23 5.0V avalanche reg diode  
9A1 PZM9.1NB2A Phi A SOT346 dual ca 9.1V 0.3W zener  
9B NJM79L03UA NJR KQR SOT89 79L reg 3.0V 0.1A  
9B PLVA653A Phi C SOT23 5.3V avalanche reg diode  
9C NJM79L05UA NJR KQR SOT89 79L reg 5.0V 0.1A  
9C PLVA656A Phi C SOT23 5.6V avalanche reg diode  
9D PLVA659A Phi C SOT23 5.9V avalanche reg diode  
9E NJM79L06UA NJR KQR SOT89 79L reg 6.0V 0.1A  
9E PLVA662A Phi C SOT23 6.2V avalanche reg diode  
9F PLVA665A Phi C SOT23 6.5V avalanche reg diode  
9G NJM79L08UA NJR KQR SOT89 79L reg 8.0V 0.1A  
9G PLVA668A Phi C SOT23 6.8V avalanche reg diode  
9H NJM79L09UA NJR KQR SOT89 79L reg 9.0V 0.1A  
9J PLVA2650A Phi A SOT23 dual ca 5.0V reg diode  
9K NJM79L12UA NJR KQR SOT89 79L reg 12V 0.1A  
9K PLVA2653A Phi A SOT23 dual ca 5.3V reg diode  
9L NJM79L15UA NJR KQR SOT89 79L reg 15V 0.1A  
9L PLVA2656A Phi A SOT23 >dual 5.60V reg diode  
9M NJM79L18UA NJR KQR SOT89 79L reg 18V 0.1A  
9M PLVA2659A Phi A SOT23 dual ca 5.9V reg diode  
9N PLVA2662A Phi A SOT23 dual ca 6.2V reg diode  
9O PLVA2665A Phi A SOT23 dual ca 6.5V reg diode  
9P NJM79L24UA NJR KQR SOT89 79L reg 24V 0.1A  
9P PLVA2668A Phi A SOT23 dual ca 6.8V reg diode  
9P BCX70HR Zet R SOT23 BCX70H  
9R FMMT2369R Zet R SOT23 2N2369  
9V1 PZM9.1NB Phi C SOT346 9.1V 0.3W zener  
9Y1 BZV49-C9V1 Phi O SOT89 9.1V 1W zener

### Codes beginning with 'A'

**Code Device Manufacturer Base Package Leaded Equivalent/Data**

A BA892 Sie I SCD80 35V 100mA pin  
A 1SS355 Roh I USM 100V 50mA sw  
A MRF947 Mot N SOT323 npn RF 8 GHz  
A0 HSMS-2800 HP C SOT23 HP2800 schottky  
A0 HSMS-280B HP C SOT323 HP2800 schottky

**A03** VAM-03 MC AQ - modamp MAR 3 Similar  
**A06** VAM-06 MC AQ - modamp MAR 6 Similar  
**A07** VAM-07 MC AQ - modamp MAR 7 Similar  
**A1** HSMS-2801 HP K - HP2800 schottky  
**A1** BAW56W Phi A SOT323 dual ca BAW62 (1N4148)  
**A1** BAW56 Phi A SOT23 dual ca BAW62 (1N4148)  
**A1** BAW56 Phi A SOT23 dual ca BAW62 (1N4148)  
**A1p** BAW56 Phi A SOT23 dual ca BAW62 (1N4148)  
**A1t** BAW56T Phi A SOT416 dual ca BAW62 (1N4148)  
**A1t** BAW56S Phi SOT363 dual ca BAW62 (1N4148)  
**A1s** BAW56W Sie A SOT323 dual ca BAW62 (1N4148)  
**A1s** BAW56 Sie A SOT23 dual ca BAW62 (1N4148)  
**A1s** BAW56U Sie A SC74 dual ca BAW62 (1N4148)  
**A1X** MBAW56 Mot A - ditto  
**A2** HSMS-2802 HP D SOT23 dual HP2800  
**A2** HSMS-280C HP D SOT323 dual HP2800  
**A2** BAT18 Phi C SOT23 BA482  
**A2s** BAT18 Sie C SOT23 BA482  
**A2** MMBD2836 Mot A SOT23 dual ca sw diode 75V  
**A2** CFY30 Sie CQ SOT143 n-ch GaAsfet 6 GHz  
**A2** MBT3906DW1 Mot DO SOT363 dual 2N3906  
**A22** BAS21 Phi C SOD27 BAV21  
**A2X** MMBD2836 Mot A SOT23 dual ca sw 75V 100mA 15ns  
**A3** BAP64-03 Phi I SOD323 3 GHz pin diode  
**A3** HSMS-2803 HP D SOT23 HP2800 ser pair  
**A3** MMBD1005 Mot A SOT23 dual ca Si diode low leakage  
**A3** BAS16 Zet C - Si sw 75V 100mA  
**A3** BAT17 Phi C SOT23 BA481  
**A3p** BAT17 Phi C SOT23 BA481  
**A3t** BAT17 Phi C SOT23 BA481  
**A3** MBT3906DW Mot N SOT363 dual 2N3906  
**A3X** MMBD2835 Mot A SOT23 dual ca sw 35V 100mA 15ns  
**A4** HSMS-2804 HP B SOT23 dual cc HP2800 schottky  
**A4s** BAV70W Sie B SOT323 dual cc BAW62  
**A4s** BAV70 Sie B SOT23 dual cc BAW62  
**A4s** BAV70T Sie B SOT416 dual cc BAW62  
**A4s** BAV70U Sie B SC74 dual cc BAW62  
**A4** BAV70W Phi B SOT323 dual cc BAW62  
**A4p** BAV70 Phi B SOT23 dual cc BAW62  
**A4t** BAV70 Phi B SOT23 dual cc BAW62  
**A4t** BAV70 Phi B SOT363 dual cc BAW62  
**A4X** MBAV70 Mot B - ditto  
**A5** BAP51-03 Phi I SOD323 GP RF pin diode  
**A5p** BRY61 Phi - SOT143 -  
**A5t** BRY61 Phi - SOT143 -  
**A5** HSMS-2805 HP S SOT143 dual HP2800 schottky  
**A5** MMBD1010 Mot B SOT23 dual cc Si diodes  
**A5** MMBD2837 Mot B SOT23 dual cc diodes 30V 150mA  
**A6s** BAS16W Sie C SOT323 BAW62 (1N4148)  
**A6s** BAS16 Sie C SOT23 BAW62 (1N4148)  
**A6s** BAS16U Sie C SC74 BAW62 (1N4148)  
**A6** BAS16W Phi C SOT323 BAW62 (1N4148)  
**A6p** BAS16 Phi C SOT23 BAW62 (1N4148)  
**A6t** BAS16 Phi C SOT23 BAW62 (1N4148)  
**A6** BAS16T Phi C SOT416 BAW62 (1N4148)  
**A6** BAS216 Phi I SOD110 BAW62 (1N4148)  
**A6p** BAS316 Phi I SOD323 BAW62 (1N4148)  
**A6** MMBD2836 Mot B SOT23 dual sw diode cc 75V  
**A6A** MMUN2111 Mot N SOT23 pnp dtr 10k+10k  
**A6B** MMUN2112 Mot N SOT23 pnp dtr 22k+22k  
**A6C** MMUN2113 Mot N SOT23 pnp dtr 47k+47k  
**A6D** MMUN2114 Mot N SOT23 pnp dtr 100k+100k  
**A6E** MMUN2115 Mot N SOT23 pnp dtr R1 10k  
**A6F** MMUN2116 Mot N SOT23 pnp dtr R1 4k7  
**A6G** MMUN2130 Mot N SOT23 pnp dtr 1k0+1k0  
**A6H** MMUN2131 Mot N SOT23 pnp dtr 2k2+2k2  
**A6J** MMUN2132 Mot N SOT23 pnp dtr 4k7+4k7  
**A6K** MMUN2133 Mot N SOT23 pnp dtr 4k7+47k  
**A6L** MMUN2134 Mot N SOT23 pnp dtr 22k+47k  
**A6X** MMBD2838 Mot B SOT23 dual sw 50V 100mA

**A7s** BAV99 Sie D SOT23 dual ser BAW92  
**A7s** BAV99W Sie D SOT323 dual ser BAW92  
**A7s** BAV99T Sie D SC75 dual ser BAW92  
**A7s** BAV99U Sie D SC74 dual ser BAW92  
**A7** BAV99W Phi D SOT323 dual ser BAW92  
**A7** BAV99 Phi D SOT23 dual ser BAW92  
**A7** HSMS-2807 HP RQ SOT143 HP2800 ring quad  
**A8** HSMS-2808 HP BQ SOT143 HP2800 bridge quad  
**A8** BAP50-03 Phi I SOD323 GP RF pin diode  
**A8** BAS19 Phi C SOT23 BAV19  
**A8** SI2308DS Sil M SOT23 N-ch mosfet, 60V 0.1A  
**A8A** MMUN2211 Mot N SOT23 npn dtr 10k +10k  
**A8B** MMUN2212 Mot N SOT23 npn dtr 22k +22k  
**A8C** MMUN2213 Mot N SOT23 npn dtr 47k+47k  
**A8D** MMUN2214 Mot N SOT23 npn dtr 100k+100k  
**A8E** MMUN2215 Mot N SOT23 npn dtr R1 10k  
**A8F** MMUN2216 Mot N SOT23 npn dtr R1 4k7  
**A8G** MMUN2230 Mot N SOT23 npn dtr 1k0 +1k0  
**A8H** MMUN2231 Mot N SOT23 npn dtr 2k2+2k2  
**A8J** MMUN2232 Mot N SOT23 npn dtr 4k7+4k7  
**A8K** MMUN2233 Mot N SOT23 npn dtr 4k7+47k  
**A8L** MMUN2234 Mot N SOT23 npn dtr 22k+47k  
**A9** SI2309DS Sil M SOT23 P-ch mosfet, 60V 0.1A  
**A11** MMBD1501A Fch C SOT23 180V 200mA diode  
**A13** MMBD1503A Fch D SOT23 180V 200mA dual diode series  
**A14** MMBD1504A Fch B SOT23 180V 200mA dual diode cc  
**A15** MMBD1505A Fch A SOT23 180V 200mA dual diode ca  
**A16** ZC934A Zet C SOT23 25-95pF hyperabrupt varicap  
**A17** ZC933A Zet C SOT23 12-42pF hyperabrupt varicap  
**A51** BRY62 Phi - SOT143 -  
**A81** BAS20 Phi C SOT23 BAV20  
**A82** BAS21 Phi C SOT23 BAV21  
**A91** BAS17 Phi C SOT23 BA314  
**AA** BCX51 Sie P SOT89 pnp 45V audio comp BCX54  
**AA** BCW60A TT N SOT23 BCY58-vii  
**AA** ZMV829A Zet I SOD323 varicap hyperabrupt 28V 8.2pF@2V  
**AAs** BCW60A Sie N SOT23 BCY58-vii  
**AAA** MMBF4856 Mot F SOT23 2N4856 n-ch chopper jfet  
**AAAA** MAX809LXR MAX ZB SOT23 microproc -ve reset gen 5.0V  
**AAAX** MAX2470 MAX DT SOT23-6 VCO Buffer Amplifiers  
**AAAY** MAX2471 MAX DT SOT23-6 VCO Buffer Amplifiers  
**AAG** MMBR951AL Mot N SOT23 npn RF 8GHz  
**AAH** MAX6326\_R22-T Max ZB SC70 microproc -ve reset gen 2.200V  
**AAI** MAX6327\_R22-T Max ZB SC70 microproc +ve reset gen 2.200V  
**AAJ** MAX6328\_R22-T Max ZB SC70 microproc -ve reset gen 2.200V  
**AAK** MAX6410BS33-T Max UC4 UCSP-4 Volt. Detect. (3.300 V / Push-Pull,Active-High)  
**AAAL** MAX6410BS34-T Max UC4 UCSP-4 Volt. Detect. (3.400 V / Push-Pull,Active-High)  
**AAAM** MAX6410BS35-T Max UC4 UCSP-4 Volt. Detect. (3.500 V / Push-Pull,Active-High)  
**AAAN** MAX6410BS36-T Max UC4 UCSP-4 Volt. Detect. (3.600 V / Push-Pull,Active-High)  
**AAAN** MAX809LXR Max ZB SC70 microproc -ve reset gen 5.0V  
**AAO** MAX6410BS37-T Max UC4 UCSP-4 Volt. Detect. (3.700 V / Push-Pull,Active-High)  
**AAO** MAX809MXR Max ZB SC70 microproc -ve reset gen 5.0V  
**AAP** MAX6410BS38-T Max UC4 UCSP-4 Volt. Detect. (3.800 V / Push-Pull,Active-High)  
**AAP** MAX809TXR Max ZB SC70 microproc -ve reset gen 3.3V  
**AAQ** MAX6410BS39-T Max UC4 UCSP-4 Volt. Detect. (3.900 V / Push-Pull,Active-High)  
**AAQ** MAX809SXR Max ZB SC70 microproc -ve reset gen 3.3V  
**AAR** MAX6410BS40-T Max UC4 UCSP-4 Volt. Detect. (4.000 V / Push-Pull,Active-High)  
**AAR** MAX809RXR Max ZB SC70 microproc -ve reset gen 3.0V  
**AAS** MAX6410BS41-T Max UC4 UCSP-4 Volt. Detect. (4.100 V / Push-Pull,Active-High)  
**AAS** MAX803ZXR Max ZB SC70 microproc -ve reset gen 2.5V  
**AAT** MAX6410BS42-T Max UC4 UCSP-4 Volt. Detect. (4.200 V / Push-Pull,Active-High)  
**AAT** MAX810LXR Max ZB SC70 microproc +ve reset gen 5.0V  
**AAU** MAX6410BS43-T Max UC4 UCSP-4 Volt. Detect. (4.300 V / Push-Pull,Active-High)  
**AAU** MAX810MXR Max ZB SC70 microproc +ve reset gen 5.0V  
**AAV** MAX6410BS44-T Max UC4 UCSP-4 Volt. Detect. (4.380 V / Push-Pull,Active-High)  
**AAV** MAX810TXR Max ZB SC70 microproc +ve reset gen 3.3V  
**AAW** MAX6410BS45-T Max UC4 UCSP-4 Volt. Detect. (4.500 V / Push-Pull,Active-High)  
**AAW** MAX810RXR Max ZB SC70 microproc +ve reset gen 3.0V  
**AAX** MAX6410BS46-T Max UC4 UCSP-4 Volt. Detect. (4.630 V / Push-Pull,Active-High)  
**AAX** MAX810SXR Max ZB SC70 microproc +ve reset gen 3.3V

AAV MAX6411BS33-T Max UC4 UCSP-4 Volt. Detect. (3.300 V/Open Drain,Active-Low)  
AAV MAX810ZXR Max ZB SC70 microproc +ve reset gen 2.5V  
AAZ MAX6411BS34-T Max UC4 UCSP-4 Volt. Detect. (3.400 V/Open Drain,Active-Low)  
AAZ MAX803LXR Max ZB SC70 microproc -ve reset gen 5.0V  
AB BCW60B ITT N SOT23 BCY58-viii  
AB ZMV830A Zet I SOD323 varicap hyperabrupt 28V 10pF@2V  
ABs BCW60B Sie N SOT23 BCY58-viii  
ABp BCW60B Phi N SOT23 BCY58-viii  
ABt BCW60B Phi N SOT23 BCY58-viii  
ABA MAX6411BS35-T Max UC4 UCSP-4 Volt. Detect. (3.500 V/Open Drain,Active-Low)  
ABA MAX803TXR Max ZB SC70 microproc -ve reset gen 5.0V  
ABAA MAX809MXR Max ZB SOT23 microproc -ve reset gen 5.0V  
ABB MAX6411BS36-T Max UC4 UCSP-4 Volt. Detect. (3.600 V/Open Drain,Active-Low)  
ABB MAX803MXR Max ZB SC70 microproc -ve reset gen 3.3V  
ABC MAX6411BS37-T Max UC4 UCSP-4 Volt. Detect. (3.700 V/Open Drain,Active-Low)  
ABC MAX803SXR Max ZB SC70 microproc -ve reset gen 3.3V  
ABD MAX6411BS38-T Max UC4 UCSP-4 Volt. Detect. (3.800 V/Open Drain,Active-Low)  
ABD MAX803RXR Max ZB SC70 microproc -ve reset gen 3.0V  
ABE MAX6411BS39-T Max UC4 UCSP-4 Volt. Detect. (3.900 V/Open Drain,Active-Low)  
ABE MAX803ZXR Max ZB SC70 microproc -ve reset gen 2.5V  
ABF MAX6411BS40-T Max UC4 UCSP-4 Volt. Detect. (4.000 V/Open Drain,Active-Low)  
ABF LM4041AIX3-1.2 Max L SC70 1.225V 0.1% shunt V ref  
ABG MAX6411BS41-T Max UC4 UCSP-4 Volt. Detect. (4.100 V/Open Drain,Active-Low)  
ABG LM4041BIX3-1.2 Max L SC70 1.225V 0.2% shunt V ref  
ABH MAX6411BS42-T Max UC4 UCSP-4 Volt. Detect. (4.200 V/Open Drain,Active-Low)  
ABH LM4041DIX3-1.2 Max L SC70 1.225V 0.5% shunt V ref  
ABI MAX6411BS43-T Max UC4 UCSP-4 Volt. Detect. (4.300 V/Open Drain,Active-Low)  
ABI LM4041DIX3-1.2 Max L SC70 1.225V 1.5% shunt V ref  
ABJ MAX6411BS44-T Max UC4 UCSP-4 Volt. Detect. (4.380 V/Open Drain,Active-Low)  
ABJ LM4040AIX3-2.1 Max L SC70 2.048V 0.1% shunt V ref  
ABK MAX6411BS45-T Max UC4 UCSP-4 Volt. Detect. (4.500 V/Open Drain,Active-Low)  
ABK LM4040BIX3-2.1 Max L SC70 2.048V 0.2% shunt V ref  
ABL MAX6411BS46-T Max UC4 UCSP-4 Volt. Detect. (4.640 V/Open Drain,Active-Low)  
ABL LM4040CIX3-2.1 Max L SC70 2.048V 0.5% shunt V ref  
ABM LM4040DIX3-2.1 Max L SC70 2.048V 1% shunt V ref  
ABN LM4040AIX3-2.5 Max L SC70 2.5001% shunt V ref  
ABO LM4040BIX3-2.5 Max L SC70 2.500V 0.2% shunt V ref  
ABP LM4040CIX3-2.5 Max L SC70 2.500V 0.5% shunt V ref  
ABQ LM4040DIX3-2.5 Max L SC70 2.500V 1% shunt V ref  
ABR LM4040AIX3-3.0 Max L SC70 3.000V 0.1% shunt V ref  
ABS LM4040BIX3-3.0 Max L SC70 3.000V 0.2% shunt V ref  
ABT LM4040CIX3-3.0 Max L SC70 3.000V 0.5% shunt V ref  
ABU LM4040DIX3-3.0 Max L SC70 3.000V 1% shunt V ref  
ABV LM4040AIX3-4.1 Max L SC70 4.096V 0.1% shunt V ref  
ABW LM4040BIX3-4.1 Max L SC70 4.096V 0.2% shunt V ref  
ABX LM4040CIX3-4.1 Max L SC70 4.096V 0.5% shunt V ref  
ABY LM4040DIX3-4.1 Max L SC70 4.096V 1% shunt V ref  
ABZ LM4040AIX3-5.0 Max L SC70 5.000V 0.1% shunt V ref  
AC BCX51-100 Sie P SOT89 45V pnp audio hfe 100  
AC BCX51-10 Phi P SOT89 45V pnp audio hfe 100  
AC BCW60C Phi N SOT23 BCY58-ix  
AC ZMV831A Zet I SOD323 varicap hyperabrupt 28V 15pF@2V  
ACs BCW60C Sie N SOT23 BCY58-ix  
ACp BCW60C Phi N SOT23 BCY58-ix  
ACt BCW60C Phi N SOT23 BCY58-ix  
ACA LM4040BIX3-5.0 Max L SC70 5.000V 0.2% shunt V ref  
ACAA MAX809TXR Max ZB SOT23 microproc -ve reset gen 3.3V  
ACB LM4040CIX3-5.0 Max L SC70 5.000V 0.5% shunt V ref  
ACC LM4040DIX3-5.0 Max L SC70 5.000V 1% shunt V ref  
ACE MAX6326\_R31-T Max ZB SC70 microproc -ve reset gen 3.080V  
ACF MAX6347\_R46-T Max ZB SC70 microproc +ve reset gen 4.630V  
ACH MAX6326\_R23-T Max ZB SC70 microproc -ve reset gen 2.320V  
ACI MAX6326\_R26-T Max ZB SC70 microproc -ve reset gen 2.630V  
ACJ MAX6328\_R26-T Max ZB SC70 microproc -ve reset gen 2.630V  
ACK MAX6346\_R44-T Max ZB SC70 microproc -ve reset gen 4.380V  
ACL MAX6347\_R44-T Max ZB SC70 microproc +ve reset gen 4.380V  
ACM MAX6348\_R46-T Max ZB SC70 microproc -ve reset gen 4.630V  
ACN MAX6348\_R44-T Max ZB SC70 microproc -ve reset gen 4.380V  
ACO MAX6346\_R46-T Max ZB SC70 microproc -ve reset gen 4.630V  
ACP MAX6326\_R29-T Max ZB SC70 microproc -ve reset gen 2.930V

**ACQ** MAX6327\_R23-T Max ZB SC70 microproc +ve reset gen 2.320V  
**ACR** MAX6327\_R26-T Max ZB SC70 microproc +ve reset gen 2.630V  
**ACS** MAX6327\_R29-T Max ZB SC70 microproc +ve reset gen 2.930V  
**ACT** MAX6327\_R31-T Max ZB SC70 microproc +ve reset gen 3.080V  
**ACU** MAX6328\_R23-T Max ZB SC70 microproc -ve reset gen 2.320V  
**ACV** MAX6328\_R29-T Max ZB SC70 microproc -ve reset gen 2.930V  
**ACW** MAX6326\_R31-T Max ZB SC70 microproc -ve reset gen 3.080V  
**AD** BCX51-160 Sie P SOT89 45V pnp audio hfe 160  
**AD** BCX51-16 Phi P SOT89 45V pnp audio hfe 160  
**AD** BCW60D Phi N SOT23 BCY58-x  
**AD** ZMV832A Zet I SOD323 varicap hyperabrupt 28V 22pF@2V  
**ADs** BCW60D Sie N SOT23 BCY58-x  
**ADp** BCW60D Phi N SOT23 BCY58-x  
**ADt** BCW60D Ph N SOT23 BCY58-x  
**ADAA** MAX809SXR Max ZB SOT23 microproc -ve reset gen 3.3V  
**ADN** 2SC3838K Roh N - npn 11V 3.2GHz TV tuners  
**ADW** MAX6406BS22-T Max UC4 UCSP-4 Volt. Detect. (2.200 V / Push-Pull, Active-Low)  
**ADX** MAX6406BS23-T Max UC4 UCSP-4 Volt. Detect. (2.320 V / Push-Pull, Active-Low)  
**ADY** MAX6406BS24-T Max UC4 UCSP-4 Volt. Detect. (2.400 V / Push-Pull, Active-Low)  
**ADZ** MAX6406BS25-T Max UC4 UCSP-4 Volt. Detect. (2.500 V / Push-Pull, Active-Low)  
**AE** BCX52 Sie P SOT89 pnp 60V audio comp BCX55  
**AE** ZMV833A Zet I SOD323 varicap hyperabrupt 28V 33pF@2V  
**AEA** MAX6406BS26-T MAX UC4 UCSP-4 Volt. Detect. (2.630 V / Push-Pull, Active-Low)  
**AEB** MAX6406BS27-T MAX UC4 UCSP-4 Volt. Detect. (2.700 V / Push-Pull, Active-Low)  
**AEC** MAX6406BS28-T MAX UC4 UCSP-4 Volt. Detect. (2.800 V / Push-Pull, Active-Low)  
**AED** MAX6406BS29-T MAX UC4 UCSP-4 Volt. Detect. (2.930 V / Push-Pull, Active-Low)  
**AEE** MAX6406BS30-T MAX UC4 UCSP-4 Volt. Detect. (3.000 V / Push-Pull, Active-Low)  
**AEF** MAX6406BS31-T MAX UC4 UCSP-4 Volt. Detect. (3.080 V / Push-Pull, Active-Low)  
**AEG** MAX6407BS22-T MAX UC4 UCSP-4 Volt. Detect. (2.200 V / Push-Pull, Active-High)  
**AEH** MAX6407BS23-T MAX UC4 UCSP-4 Volt. Detect. (2.300 V / Push-Pull, Active-High)  
**AEI** MAX6407BS24-T MAX UC4 UCSP-4 Volt. Detect. (2.400 V / Push-Pull, Active-High)  
**AEJ** MAX6407BS25-T MAX UC4 UCSP-4 Volt. Detect. (2.500 V / Push-Pull, Active-High)  
**AEK** MAX6407BS26-T MAX UC4 UCSP-4 Volt. Detect. (2.630 V / Push-Pull, Active-High)  
**AEL** MAX6407BS27-T MAX UC4 UCSP-4 Volt. Detect. (2.700 V / Push-Pull, Active-High)  
**AEM** MAX6407BS28-T MAX UC4 UCSP-4 Volt. Detect. (2.800 V / Push-Pull, Active-High)  
**AEN** MAX6407BS29-T MAX UC4 UCSP-4 Volt. Detect. (2.930 V / Push-Pull, Active-High)  
**AEN** 2SC3839K Roh N - npn 20V 2.0GHz TV tuners  
**AEO** MAX6407BS30-T Max UC4 UCSP-4 Volt. Detect. (3.000 V / Push-Pull,Active-High)  
**AEP** MAX6407BS31-T Max UC4 UCSP-4 Volt. Detect. (3.000 V / Push-Pull,Active-High)  
**AEQ** MAX6408BS22-T Max UC4 UCSP-4 Volt. Detect. (2.200 V/Open Drain,Active-Low)  
**AER** MAX6408BS23-T Max UC4 UCSP-4 Volt. Detect. (2.320 V/Open Drain,Active-Low)  
**AES** MAX6408BS24-T Max UC4 UCSP-4 Volt. Detect. (2.400 V/Open Drain,Active-Low)  
**AET** MAX6408BS25-T Max UC4 UCSP-4 Volt. Detect. (2.500 V/Open Drain,Active-Low)  
**AEU** MAX6408BS26-T Max UC4 UCSP-4 Volt. Detect. (2.630 V/Open Drain,Active-Low)  
**AEV** MAX6408BS27-T Max UC4 UCSP-4 Volt. Detect. (2.700 V/Open Drain,Active-Low)  
**AEW** MAX6138AEXR12-T Max L SC70-3 Shunt Voltage Ref. (output 1.2205 V / 0.1%)  
**AEW** MAX6408BS28-T Max UC4 SC70-3 Volt. Detect. (2.800 V/Open Drain,Active-Low)  
**AEX** MAX6138BEXR12-T Max L SC70-3 Shunt Voltage Ref. (output 1.2205 V / 0.2%)  
**AEX** MAX6408BS29-T Max UC4 UCSP-4 Volt. Detect. (2.930 V/Open Drain,Active-Low)  
**AEY** MAX6138CEXR12-T Max L SC70-3 Shunt Voltage Ref. (output 1.2205 V / 0.5%)  
**AEY** MAX6408BS30-T Max UC4 UCSP-4 Volt. Detect. (3.000 V/Open Drain,Active-Low)  
**AEZ** MAX6408BS31-T Max UC4 UCSP-4 Volt. Detect. (3.080 V/Open Drain,Active-Low)  
**AF** ZMV834A Zet I SOD323 varicap hyperabrupt 28V 47pF@2V  
**AFs** BCW60FF Sie N SOT23 BCY58  
**AFA** MAX6138AEXR21-T Max L SC70-3 Shunt Voltage Ref. (output 2.0480 V / 0.1%)  
**AFA** MAX6409BS33-T Max - UCSP-4 Volt. Detect. (3.300 V / Push-Pull, Active-Low)  
**AFAA** MAX809RXR Max ZB SOT23 microproc -ve reset gen 3.0V  
**AFB** MAX6138BEXR21-T Max L SC70-3 Shunt Voltage Ref. (output 2.0480 V / 0.2%)  
**AFB** MAX6409BS34-T Max UC4 UCSP-4 Volt. Detect. (3.400 V / Push-Pull, Active-Low)  
**AFC** MAX6138CEXR21-T Max L SC70-3 Shunt Voltage Ref. (output 2.0480 V / 0.5%)  
**AFC** MAX6409BS35-T Max UC4 UCSP-4 Volt. Detect. (3.500 V / Push-Pull, Active-Low)  
**AFD** MAX6409BS36-T Max UC4 UCSP-4 Volt. Detect. (3.600 V / Push-Pull, Active-Low)  
**AFE** MAX6138AEXR25-T Max L SC70-3 Shunt Voltage Ref. (output 2.5000 V / 0.1%)  
**AFE** MAX6409BS37-T Max UC4 UCSP-4 Volt. Detect. (3.700 V / Push-Pull, Active-Low)  
**AFF** MAX6138BEXR25-T Max L SC70-3 Shunt Voltage Ref. (output 2.5000 V / 0.2%)  
**AFF** MAX6409BS38-T Max UC4 UCSP-4 Volt. Detect. (3.800 V / Push-Pull, Active-Low)  
**AFG** MAX6138CEXR25-T Max L SC70-3 Shunt Voltage Ref. (output 2.5000 V / 0.5%)  
**AFG** MAX6409BS39-T Max UC4 UCSP-4 Volt. Detect. (3.900 V / Push-Pull, Active-Low)  
**AFH** MAX6409BS40-T Max UC4 UCSP-4 Volt. Detect. (4.000 V / Push-Pull, Active-Low)  
**AFI** MAX6138AEXR30-T Max L SC70-3 Shunt Voltage Ref. (output 3.0000 V / 0.1%)

**AFI** MAX6409BS41-T Max UC4 UCSP-4 Volt. Detect. (4.100 V / Push-Pull, Active-Low)  
**AFJ** MAX6138BEXR30-T Max L SC70-3 Shunt Voltage Ref. (output 3.0000 V / 0.2%)  
**AFJ** MAX6409BS42-T Max UC4 UCSP-4 Volt. Detect. (4.200 V / Push-Pull, Active-Low)  
**AFK** MAX6138CEXR30-T Max L SC70-3 Shunt Voltage Ref. (output 3.0000 V / 0.5%)  
**AFK** MAX6409BS43-T Max UC4 UCSP-4 Volt. Detect. (4.300 V / Push-Pull, Active-Low)  
**AFL** MAX6409BS44-T Max UC4 UCSP-4 Volt. Detect. (4.380 V / Push-Pull, Active-Low)  
**AFM** MAX6138AEXR41-T Max L SC70-3 Shunt Voltage Ref. (output 4.0960 V / 0.1%)  
**AFM** MAX6409BS45-T Max UC4 UCSP-4 Volt. Detect. (4.500 V / Push-Pull, Active-Low)  
**AFN** MAX6138BEXR41-T Max L SC70-3 Shunt Voltage Ref. (output 4.0960 V / 0.2%)  
**AFN** MAX6409BS46-T Max UC4 UCSP-4 Volt. Detect. (4.630 V / Push-Pull, Active-Low)  
**AFO** MAX6138CEXR41-T Max L SC70-3 Shunt Voltage Ref. (output 4.0960 V / 0.5%)  
**AFQ** MAX6138AEXR50-T Max L SC70-3 Shunt Voltage Ref. (output 5.0000 V / 0.1%)  
**AFR** MAX6138BEXR50-T Max L SC70-3 Shunt Voltage Ref. (output 5.0000 V / 0.2%)  
**AFS** MAX6138CEXR50-T Max L SC70-3 Shunt Voltage Ref. (output 5.0000 V / 0.5%)  
**AG** ZMV835A Zet I SOD323 varicap hyperabrupt 28V 68pF@2V  
**AG** BCX70G Phi N SOT23 BCY59-vii BC107  
**AGs** BCX70G Sie N SOT23 BCY59-vii BC107  
**AGp** BCX70G Phi N SOT23 BCY59-vii BC107  
**AGt** BCX70G Phi N SOT23 BCY59-vii BC107  
**AG** BCX52-10 Sie P SOT89 60V pnp BCX52 hfe 100  
**AGAA** MAX810LXR Max ZB SOT23 microproc +ve reset gen 5.0V  
**AH** BCX70H Phi N SOT23 BCY59-viii BC107B  
**AHs** BCX70H Sie N SOT23 BCY59-viii BC107B  
**AHp** BCX70H Phi N SOT23 BCY59-viii BC107B  
**AHt** BCX70H Phi N SOT23 BCY59-viii BC107B  
**AH** BCP53 Mot P SOT223 pnp amp 80V 150mA  
**AH** BCX53 Sie P SOT89 pnp 80V audio comp BCX56  
**AH** ZMV930 Zet I SOD323 2.9-8.3pF hyperabrupt varicap  
**AHAA** MAX810MXR Max ZB SOT23 microproc +ve reset gen 5.0V  
**AJ** BCX70J Phi N SOT23 BCY59-ix BC107  
**AJ s** BCX70J Sie N SOT23 BCY59-ix BC107  
**AJp** BCX70J Phi N SOT23 BCY59-ix BC107  
**AJt** BCX70J Phi N SOT23 BCY59-ix BC107  
**AJ** ZMV931 Zet I SOD323 4 -13.5pF hyperabrupt varicap  
**AJAA** MAX810TXR MAX ZB SOT23 microproc +ve reset gen 3.3V  
**AK** BCX70K Phi N SOT23 BCY59-x BC107  
**AK** ZMV932 Zet I SOD323 5.5-17pF hyperabrupt varicap  
**AKs** BCX70K Sie N SOT23 BCY59-x BC107  
**AKp** BCX70K Phi N SOT23 BCY59-x BC107  
**AKp** BCX70K Phi N SOT23 BCY59-x BC107  
**AK** BCX53-10 Sie P SOT89 pnp 80V BCX53 hfe 100  
**AKAA** MAX810SXR MAX ZB SOT23 microproc +ve reset gen 3.3V  
**AL** BCX53-16 Sie P SOT89 80V pnp BCX53 hfe 100  
**AL** MMBTA55L Mot N SOT23 pnp 25V (MPSA55)  
**AL** ZMV933 Zet I SOD323 12-42pF hyperabrupt varicap  
**ALs** BFP405 Sie MQ SOT343 -  
**ALAA** MAX810SXR MAX ZB SOT23 microproc +ve reset gen 3.0V  
**AM** MMBT3904W Mot N SOT323 2N3904  
**AM** BCX52-16 Sie P SOT89 pnp 60V BCX52 hfe 160  
**AMs** BFP420 Sie MQ SOT343 npn fT 25GHz 4.5V 35mA  
**AM** BSS64 Mot N SOT23 npn 80V 0.1A fT 60MHz  
**AMs** BSS64 Sie N SOT23 npn 80V 0.1A fT 60MHz  
**AMp** BSS64 Phi N SOT23 npn 80V 0.1A fT 60MHz  
**AMt** BSS64 Phi N SOT23 npn 80V 0.1A fT 60MHz  
**AM** ZMV933A Zet I SOD323 12-42pF hyperabrupt varicap  
**AN** BCW60FN Sie N SOT23 gp npn 35V 0.2A  
**ANs** BFP450 Sie MQ SOT343 npn fT 25GHz 4.5V 100mA  
**AN** ZMV934 Zet I SOD323 25-95pF hyperabrupt varicap  
**AO** BCW60AR ITT R SOT23R BCY58-vii  
**AO** ZMV934A Zet I SOD323 25-95pF hyperabrupt varicap  
**AP** BCW60BR ITT R SOT23R BCY58-viii  
**APs** BFP520 Sie MQ SOT343 npn fT 40GHz 2.5V 40mA  
**A-Q** 2PD1820AQ Phi N SOT323 gp sw amp 50V npn hfe 85-170  
**AtQ** 2PD1820AQ Phi N SOT323 gp sw amp 50V npn hfe 85-170  
**AR** BCW60CR ITT R SOT23R BCY58-ix  
**AR** MSD709R Mot N - pnp gp 25V  
**AR1** BSR40 Phi P SOT89 npn 70V 1A 1.35W hfe 40-120  
**AR2** BSR41 Phi P SOT89 npn 70V 1A 1.35W hfe 100-300  
**AR3** BSR42 Phi P SOT89 npn 90V 1A 1.35W hfe 40-120  
**AR4** BSR43 Phi P SOT89 npn 90V 1A 1.35W hfe 100-300

**A-Q** 2PD1820AR Phi N SOT323 gp sw amp 50V npn hfe 120-240  
**AtQ** 2PD1820AR Phi N SOT323 gp sw amp 50V npn hfe 120-240  
**A-S** 2PD1820AS Phi N SOT323 gp sw amp 50V npn hfe 170-340  
**AtS** 2PD1820AS Phi N SOT323 gp sw amp 50V npn hfe 170-340  
**AS** BCW60DR ITT R SOT23R BCY58-x  
**AS** MSD709S Mot N - pnp gp 25V  
**ASs** BAT18-05 Sie B SOT23 dual BAT18 RF pin  
**AS1** BST50 Mot P SOT89 npn darlington 0.5A 60V  
**AS2** BST51 Mot P SOT89 npn darlington 0.5A 80V  
**AS3** BST52 Mot P SOT89 npn darlington 0.5A 90V  
**AS3** BSP52 Mot P SOT223 npn darlington 0.5A hfe 2000  
**ATs** BAT18-06 Sie A SOT23 dual ca BAT18 RF pin  
**ATs** BFP540 Sie MQ SOT343 npn microwave  
**AUs** BAT18-04 Sie D SOT23 dual BAT18 RF pin  
**AU** BCW60GR ITT R SOT23R BCY58  
**AV** DAN212K Roh C - 80V 100mA sw  
**AW** BCW60HR ITT R SOT23R BCY58  
**AX** BCX70JR ITT R SOT23R BCY59-ix  
**AY** BCX70KR ITT R SOT23R BCY59-x  
**AY** MMBD1000 Mot C SOT23 Si sw diode 30V 0.2A

## Codes beginning with 'B'

### Code Device Manufacturer Base Package Leaded Equivalent/Data

**B** MRF957 Mot N SOT323 npn RF ft 9GHz  
**B** BAS16-03W Sie I SOD323 Varicap 18pF 1V  
**B** BB555 Sie I SCD80 Varicap 18pF 1V  
**B0** BZX399C4V3 Phi I SOD323 4.3V 0.3W zener  
**B0** HSMS-2810 HP C SOT23 HP2810 schottky  
**B0** HSMS-281B HP C SOT323 HP2810 schottky  
**B08** SST6908 Sil ZQ - 2N6908 prot n-ch jfet  
**B09** SST6909 Sil ZQ - 2N6909 prot n-ch jfet  
**B1** BZX399C1V8 Phi I SOD323 1.8V 0.3W zener  
**B1** HSMS-2811 HP K SOT23 HP2811 schottky  
**B1** BAS40 Mot C SOT23 schottky sw diode  
**B10** SST6910 Sil ZQ - 2N6910 prot n-ch jfet  
**B2** BZX399C2V0 Phi I SOD323 2.0V 0.3W zener  
**B2** BSV52 Phi N SOT23 BSX20 12V ft 400MHz sw  
**B2p** BSV52 Phi N SOT23 BSX20 12V ft 400MHz sw  
**B2t** BSV52 Phi N SOT23 BSX20 12V ft 400MHz sw  
**B2** HSMS-2812 HP D SOT23 dual HP2810 schottky  
**B2** HSMS-281C HP D SOT323 dual HP2810 schottky  
**B3** BZX399C2V2 Phi I SOD323 2.2V 0.3W zener  
**B3** HSMS-2813 HP A SOT23 dual ca HP2810 schottky  
**B3** MMBD717L Mot A SOT323 dual ca schottky  
**B4** BZX399C2V4 Phi I SOD323 2.4V 0.3W zener  
**B4** BSV52R Phi R SOT23R BSX20  
**B4** HSMS-2814 HP B SOT23 dual cc HP2810 schottky  
**B5** BZX399C2V7 Phi I SOD323 2.7V 0.3W zener  
**B5** HSMS-2815 HP S SOT143 dual HP2810 schottky  
**B6** BZX399C3V0 Phi I SOD323 3.0V 0.3W zener  
**B6** BAT54A Mot A SOT23 dual ca 30V schottky  
**B7** BZX399C3V3 Phi I SOD323 3.3V 0.3W zener  
**B7** HSMS-2817 HP RQ SOT143 HP2810 ring quad  
**B8** BZX399C3V6 Phi I SOD323 3.6V 0.3W zener  
**B8** HSMS-2818 HP BQ SOT143 HP2810 bridge quad  
**B9** BZX399C3V9 Phi I SOD323 3.9V 0.3W zener  
**B9** 2SC4617 Mot N SC90 npn gp  
**B26** BF570 Phi SOT23 -  
**BA** BCX54 Sie P SOT89 npn AF 45V comp BCX51  
**BA** BCW61A Phi N SOT23 BCY78-vii  
**BAp** BCW61A Phi N SOT23 BCY78-vii  
**BAt** BCW61A Phi N SOT23 BCY78-vii  
**BA** DAN217 Roh D - 80V 100mA dual  
**BA** BZX399C4V7 Phi I SOD323 4.7V 0.3W zener  
**BB** BCW61B Phi N SOT23 BCY78-viii  
**BBs** BCW61B Sie N SOT23 BCY78-viii  
**BBp** BCW61B Phi N SOT23 BCY78-viii  
**BBt** BCW61B Phi N SOT23 BCY78-viii  
**BB** BAR81 Sie NQ SOT143 Dual pin shunt switch  
**BB** BZX399C5V1 Phi I SOD323 5.1V 0.3W zener  
**BBs** BAR81W Sie NQ SOT343 Dual pin shunt switch

**BC** BCW61C Phi N SOT23 BCY78-ix  
**BCs** BCW61C Sie N SOT23 BCY78-ix  
**BC** BCX54-10 Sie Phi P SOT89 npn hfe100  
**BC** BZX399C5V6 Phi I SOD323 5.6V 0.3W zener  
**BCp** BCW61C Phi N SOT23 BCY78-ix  
**BCt** BCW61C Phi N SOT23 BCY78-ix  
**BD** BCW61D Phi N SOT23 BCY78-x  
**BDs** BCW61D Sie N SOT23 BCY78-x  
**BDp** BCW61D Phi N SOT23 BCY78-x  
**BDt** BCW61D Phi N SOT23 BCY78-x  
**BD** BCX54-16 Sie P SOT89 npn hfe160 comp BCX51-16  
**BD** BZX399C6V2 Phi I SOD323 6.2V 0.3W zener  
**BD** ZHCS400 Zet E SOT23 40V 0.4A schottky diode  
**BE** BAS70 Mot C SOT23 schottky sw diode  
**BE** BCX55 Sie P SOT89 npn AF 60V comp BCX52  
**BE** BZX399C6V8 Phi I SOD323 6.8V 0.3W zener  
**BF** BCW61FF Sie N SOT23 low noise BCW61  
**BF** BZX399C7V5 Phi I SOD323 7.5V 0.3W zener  
**BG** BCX71G Phi N SOT23 BCY79-vii  
**BGs** BCX71G Sie N SOT23 BCY79-vii  
**BGp** BCX71G Phi N SOT23 BCY79-vii  
**BGt** BCX71G Phi N SOT23 BCY79-vii  
**BG** BCX55-10 Sie Phi P SOT89 npn hfe 100  
**BG** BZX399C8V2 Phi I SOD323 8.2V 0.3W zener  
**BH** BCX71H Phi N SOT23 BCY79-viii  
**BHs** BCX71H Sie N SOT23 BCY79-viii  
**BHp** BCX71H Phi N SOT23 BCY79-viii  
**BHt** BCX71H Phi N SOT23 BCY79-viii  
**BH** BCP56 Mot P SOT223 npn amp 80V 150mA  
**BH** BCX56 Sie P SOT89 npn AF 80V  
**BH** BZX399C9V1 Phi I SOD323 9.1V 0.3W zener i  
**BJ** BCX71J Phi N SOT23 BCY79-ix  
**BJs** BCX71J Sie N SOT23 BCY79-ix  
**BJp** BCX71J Phi N SOT23 BCY79-ix  
**BJt** BCX71J Phi N SOT23 BCY79-ix  
**BJ** BZX399C10 Phi I SOD323 10V 0.3W zener  
**BK** BCP56-10 Mot P SOT223 npn amp 80V 150mA  
**BK** BCX71K Phi N SOT23 BCY79  
**BKs** BCX71K Sie N SOT23 BCY79  
**BKp** BCX71K Phi N SOT23 BCY79  
**BKt** BCX71K Phi N SOT23 BCY79  
**BK** BCX56-10 Sie P SOT89 npn hfe 100  
**BK** BZX399C11 Phi I SOD323 11V 0.3W zener  
**BL** MBD54DW Mot DL SOT363 2x schottky detector diodes  
**BL** BCP56-16 Mot P SOT223 npn amp 80V 150mA  
**BL** BCX56-16 Sie P SOT89 npn hfe 160  
**BL** BZX399C12 Phi I SOD323 12V 0.3W zener  
**BL** BGA310 Sie GQ SOT143 MMIC amp 9dB @1GHz  
**BLs** BGA420 Sie HQ SOT343 MMIC amp 13 dB @1.8GHz  
**BM** BSS63L Mot N SOT23 100v pnp comp BSS64  
**BMp** BSS63 Phi N SOT23 100v pnp comp BSS64  
**BMt** BSS63 Phi N SOT23 100v pnp comp BSS64  
**BM** BCX55-16 Sie P SOT89 npn hfe 160  
**BM** BGA312 Sie GQ SOT143 MMIC amp 11dB @1GHz  
**BM** BZX399C13 Phi I SOD323 13V 0.3W zener  
**BMs** BG427 Sie HQ SOT343 MMIC amp 18 dB @1.8GHz  
**BNs** BCW61FN Sie N SOT23 low noise BCW61  
**BN** BZX399C15 Phi I SOD323 15V 0.3W zener  
**BN** BGA318 Sie GQ SOT143 MMIC amp 16dB @1GHz  
**BO** BCW61AR Phi N SOT23 BCX78, BCY78-vii  
**BP** BCW61BR Phi N SOT23 BCY78-viii  
**BP** BZX399C16 Phi I SOD323 16V 0.3W zener  
**BQ** BZX399C18 Phi I SOD323 18V 0.3W zener in SOD323  
**BQ** 2PB709AQ Phi N SC-59 PNP 45V 0.1A hfe 160-260  
**BR** BCW61CR Phi N SOT23 BCY78-ix  
**BR** 2SC2412K Roh N - npn 50V 150mA min hfe 180  
**BR** 2SC4081 Roh N UMT 2SC2412K above  
**BR** 2SC4617 Roh N EM3 2SC2412K above  
**BR** MSB1218A Mot N SOT323 gp pnp 45V  
**BR** BZX399C20 Phi I SOD323 20V 0.3W zener

**BR** 2PB709AR Phi N SC-59 pnp45V 0.1A hfe 210-340  
**BR1** BSR30 Phi P SOT89 pnp 70V 1A 1.35W hfe 40-120  
**BR2** BSR31 Phi P SOT89 pnp 70V 1A 1.35W hfe 100-300  
**BR4** BSR33 Phi P SOT89 pnp 90V 1A 1.35W hfe 100-300  
**BS** BCW61DR Phi R SOT23 BCY78-x  
**BS** BZX399C22 Phi I SOD323 22V 0.3W zener  
**BS** 2PB709AS Phi N SC-59 pnp 45V 0.1A hfe 290-460  
**BS1** BST60 Mot P SOT89 pnp darlington 0.5A 60V  
**BS2** BST61 Mot P SOT89 pnp darlington 0.5A 80V  
**BS3** BST62 Mot P SOT89 pnp darlington 0.5A 90V  
**BS3** BSP62 Mot P SOT89 pnp darlington 0.5A hfe 2000  
**BT** BZX399C24 Phi I SOD323 24V 0.3W zener  
**BT2** BSP16 Mot P SOT223 pnp -300V 1A  
**BT2** BST16 Phi P SOT89 pnp -300V 1A  
**BU** BCX71GR Phi N SOT23 BCX79-vii  
**BU** BZX399C27 Phi I SOD323 27V 0.3W zener  
**BV** BZX399C30 Phi I SOD323 30V 0.3W zener  
**BW** BCW71HR Phi N SOT23R BCX79-viii  
**BW** BZX399C33 Phi I SOD323 33V 0.3W zener  
**BX** BCW71JR Phi N SOT23R BCX79-ix  
**BX** BZX399C36 Phi I SOD323 36V 0.3W zener  
**BY** BCW71KR Phi N SOT23R BCX79-x  
**BY** BZX399C39 Phi I SOD323 39V 0.3W zener  
**BZ** BZX399C43 Phi I SOD323 43V 0.3W zener

### Codes beginning with 'C'

#### Code Device Manufacturer Base Package Leaded Equivalent/Data

**C** BB565 Sie I SCD80 uhf varicap 2-20pF  
**C** **white** BAT165 Sie I - 40V 750mA sw Schottky  
**C** KV1832E Tok I URD uhf varicap 4-17pf  
**C0** HSMS-2820 HP C SOT23 HP2835 schottky  
**C0** HSMS-282B HP C SOT323 HP2835 schottky  
**C1** HSMS-2821 HP K SOT23 HP2835 schottky  
**C1** BCW29 Phi N SOT23 BC178A  
**C1p** BCW29 Phi N SOT23 BC178A  
**C1t** BCW29 Phi N SOT23 BC178A  
**C1** BFQ51C Phi CX SOT173 pnp BFR90A complement  
**C2** BCW30 Phi N SOT23 BC178B  
**C2p** BCW30 Phi N SOT23 BC178B  
**C2t** BCW30 Phi N SOT23 BC178B  
**C2** BFQ32C Phi CX SOT173 pnp 4.5GHz 15V 100mA  
**C2** HSMS-2822 HP D SOT23 dual HP2835 schottky  
**C2** HSMS-282C HP D SOT323 dual HP2835 schottky  
**C2** SST112 Tem F SOT23 J112 analog sw n-ch jfet  
**C2A** ZDC833A Zet B SOT23 dual cc 28V varicap 15pF @2V  
**C3** HSMS-2823 HP A SOT23 dual HP2835 schottky  
**C3** BFQ23C Phi CX SOT173 pnp complement BFP91A  
**C3** SMBT4126 Sie N - 2N4126  
**C3** SST113 Tem F SOT23 J113 analog sw jfet  
**C4** BCW29R Phi R SOT23R BC178A  
**C4** HSMS-2824 HP B SOT23 dual HP2835 schottky  
**C5** MMBA811C5 Mot N - 2N5086 pnp hfe 135-270  
**C5** BCW30R Phi R SOT23R BC178B  
**C5** HSMS-2825 HP S SOT143 dual HP2835 schottky  
**C5A** ZDC834A Zet B SOT23 dual cc 28V varicap 47pF @2V  
**C6** MMBA811C6 Mot N - 2N5086 pnp hfe 200-400  
**C7** MMBA811C7 Mot N - 2N5086 pnp hfe 300-600  
**C7** HSMS-2827 HP RQ SOT143 HP2835 ring quad  
**C8** HSMS-2828 HP BQ SOT143 HP2835 bridge quad  
**C8** BCF30 SGS N SOT23 BC559B  
**C8** MMBA811C8 Mot N - 2N5086 pnp hfe 450-900  
**C11** SST111 Sil F SOT23 J111 n-ch fet  
**C12** SST112 Sil F SOT23 J112 n-ch fet  
**C13** SST113 Sil F SOT23 J113 n-ch fet  
**C38** SST5638 Sil F SOT23 2N5638  
**C39** SST5639 Sil F SOT23 2N5639  
**C40** SST5640 Sil F SOT23 2N5640  
**C41** SST4091 Sil F SOT23 2N4091  
**C42** SST4092 Sil F SOT23 2N4092  
**C43** SST4093 Sil F SOT23 2N4093  
**C56** SST4856 Sil F SOT23 2N4856

**C57** SST4857 Sil F SOT23 2N4857  
**C58** SST4858 Sil F SOT23 2N4858  
**C59** SST4859 Sil F SOT23 2N4859  
**C60** SST4860 Sil F SOT23 2N4860  
**C61** SST4861 Sil F SOT23 2N4861  
**C91** SST4391 Sil F SOT23 2N4391  
**C92** SST4392 Sil F SOT23 2N4392  
**C93** SST4393 Sil F SOT23 2N4393  
**CA** BCW61AR Phi R SOT23R BCY78-vii  
**CA** BCP68 Mot P SOT223 20V 1A npn  
**CA** ZMV829B Zet I SOD323 varicap hyperab 28V 8.2pF@2V  
**CB** BCX68-10 Sie P SOT89 npn AF 20V 2A hfe 100  
**CB** BCW61BR Phi R SOT23R BCY78-viii  
**CB** ZMV830B Zet I SOD323 varicap hyperabrupt 28V 10pF@2V  
**CC** BCW61CR Phi R SOT23R BCY78-ix  
**CC** BCX68-16 Sie P SOT89 npn AF 20V 2A hfe 160  
**CC** ZMV831B Zet I SOD323 varicap hyperabrupt 28V 15pF@2V  
**CC** ZMDC831B Zet B SOT323 dual cc ZMV831B (above)  
**CD** BCW61DR Phi R SOT23R BCY78-x  
**CD** BCX68-25 Sie P SOT89 npn AF 20V 2A hfe 250  
**CD** ZMV832B Zet I SOD323 varicap hyperabrupt 28V 22pF@2V  
**CD** ZMDC832B Zet B SOT323 dual cc ZMV832B (above)  
**CDs** BSS81B Sie N SOT23 npn sw 35V 0.8A  
**CE** BCP69 Mot P SOT223 20V 1A pnp  
**CE** ZMV833B Zet I SOD323 varicap hyperabrupt 28V 33pF@2V  
**CEs** BSS79B Sie N SOT23 npn 40V 0.8A hfe 40-120  
**CF** BSS79C Sie N SOT23 npn 40V 0.8A hfe 100 min  
**CF** BCX69-10 Sie P SOT89 pnp AF 20V 2A hfe 100  
**CF** ZMV834B Zet I SOD323 varicap hyperabrupt 28V 47pF@2V  
**CG** BCX71GR Phi R SOT23R BCY79-vii  
**CG** BCX69-16 Sie P SOT89 pnp AF 20V 2A hfe 160  
**CG** ZMV835B Zet I SOD323 varicap hyperabrupt 28V 68pF@2V  
**CGs** BSS81C Sie N SOT23 npn sw 35V 1A  
**CHs** BSS80B Sie N SOT23 pnp 40V 0.8A hfe 40-120  
**CH** BSS82BL Mot N SOT23 pnp 60V  
**CH** BCX69-25 Sie N SOT89 pnp AF 20V 2A hfe 250  
**CJs** BSS80C Sie N SOT23 pnp 40V 0.8A hfe 100 min  
**CK** BCX71JR Phi R SOT23R BCY79-viii  
**CLs** BSS82B Sie N SOT23 pnp 60V 0.8A hfe 40-120  
**CMs** BSS82C Sie N SOT23 pnp 60V 0.8A hfe 100 min  
**CQ** 2SC2411K Roh N - npn darlington  
**CQ** MSD710Q Mot N SOT346 pnp gp 25V 150mA  
**CR** MSD701R Mot N SOT346 pnp gp 25V 150mA

### Codes beginning with 'D'

#### Code Device Manufacturer Base Package Leaded Equivalent/Data

**D** BB659 Sie I SCD80 2-38p varicap  
**D** BAS21-03W Sie I SOD323 -  
**D** 1SS376 Roh I USM 300V 50mA sw  
**D** MRF577 Mot N SOT323 npn RF fT 7GHz  
**D0** HSMP-3800 HP C SOT23 HP3800 pin atten diode  
**D1** BCW31 Phi N SOT23 BC108A  
**D1p** BCW31 Phi N SOT23 BC108A  
**D1t** BCW31 Phi N SOT23 BC108A  
**D1** HSMP-3801 HP K - HP3800 pin atten diode  
**D1** SST211 Tem XQ - n-ch mosfet 30V 1nS  
**D2** BCW32 Phi N SOT23 BC108B  
**D2p** BCW32 Phi N SOT23 BC108B  
**D2t** BCW32 Phi N SOT23 BC108B  
**D2** HSMP-3802 HP D - dual HP3800 pin atten diode  
**D3** BCW33 Phi N SOT23 BC108C  
**D3p** BCW33 Phi N SOT23 BC108C  
**D3t** BCW33 Phi N SOT23 BC108C  
**D3B** RB420D Roh C - 25V 100mA schottky  
**D3E** RB411D Roh C SOT23 20V 500mA schottky  
**D3J** RB420D Roh C - 25V 100mA schottky  
**D3L** RB706D-40 Roh B - dual 45V 30mA schottky  
**D4** BCW31R Phi R SOT23R BC108A  
**D4** HSMP-3804 HP B SOT23 dual cc HP3800 pin atten diode  
**D5** SST215 Tem XQ - n-ch mosfet 20V 1nS  
**D5** BCW32R Phi R SOT23R BC108B

**D6** BCW33R Phi R SOT23R BC108C  
**D6** MMBC1622D6 Mot N - MPS3904 hfe 200-400  
**D7p** BCF32 Phi N SOT23 -  
**D7t** BCF32 Phi N SOT23 -  
**D7** MMBC1622D7 Mot N - MPS3904 hfe 300-600  
**D8p** BCF33 Phi N SOT23 BC146/03  
**D11** SST211 Sil XQ - n-ch mosfet sw  
**D13** SST213 Sil XQ - n-ch mosfet sw  
**D11** SST215 Sil XQ - n-ch mosfet sw  
**D58** FLLD261 Zet B SOT23 low leakage dual cc Si diode  
**D63** FLLD263 Zet A SOT23 low leakage dual ca Si diode  
**D76** BAR18J SGS I SOD232 schottky 70V 15mA  
**D76** BAR18 SGS C SOT23 schottky 70V 30mA  
**D85** BAT17DS SGS D - 2xBA481  
**D86** BAT54J ST I SOD232 schottky 30V 300mA  
**D86** BAT54 ST C SOT23 schottky 30V 300mA  
**D87** BAT54C ST B SOT23 dual cc schottky 30V 300mA  
**D88** BAT54S ST D SOT23 dual series schottky 30V 300mA  
**D94** BAR42 SGS C SOT23 schottky 30V 100mA  
**D95** BAR43 SGS C SOT23 schottky 30V 100mA  
**D96** BAS70-04 SGS D SOT23 2xBA18  
**D97** BAS70-05 SGS B SOT23 2xBA18  
**D98** BAS70-06 SGS A SOT23 2xBA18  
**DA** BCW67A SGS N SOT23 pnp 32V 0.8A hfe 100 min  
**DA** BF622 Sie P SOT89 npn 250V video o/p  
**DA5** BAR43S SGS D SOT23 2xBA43  
**DB** BCW67B SGS N SOT23 pnp 32V 0.8A hfe 160 min  
**DB** BF623 Sie P SOT89 pnp 250V video o/p  
**DB1** BAR43A SGS A SOT23 2xBA43  
**DB2** BAR43C SGS B SOT23 2xBA43  
**DC** BCW67C SGS N SOT23 pnp 32V 0.8A hfe 250 min  
**DC** BF720 Mot P SOT223 npn 1.5W 300V  
**DC** BFN20 Sie P SOT89 npn video o/p 300V comp BFN21  
**DD** BFN16 Sie P SOT89 npn video o/p 250V comp BFN17  
**DE** BFN18 Sie P SOT89 npn video o/p 300Vcomp BFN19  
**DF** BCW68F SGS N SOT23 pnp 45V 0.8A hfe 100 min  
**DF** BF721 Mot P SOT223 pnp 1.5W 300V  
**DF** BFN21 Sie P SOT89 pnp 300V video o/p comp BFN20  
**DG** BCW68G SGS N SOT23 pnp 45V 0.8A hfe 160 min  
**DG** BFN17 Sie P SOT89 pnp video o/p 250V comp BFN16  
**DH** BCW68H SGS N SOT23 pnp 45V 0.8A hfe 250 min  
**DH** BCW68G Mot N SOT23 pnp 45V 0.8A hfe 160 min  
**DH** MMBD2000 Mot C SOT323 Si sw diode 20V 0.2A SOT323  
**DH** BFN19 Sie P SOT89 pnp video o/p 300V comp BFN18  
**DK** BCX42 Sie N SOT23 gp audio pnp 125V comp BCX41  
**DP** MMBD2010 Mot B SOT323 dual cc MMBD2000  
**DQ** 2P710AQ Phi N SOT346 gp pnp hfe 85-170  
**DR** 2P710AR Phi N SOT346 gp pnp hfe 120-240  
**DS** 2P710AS Phi N SOT346 gp pnp hfe 170-340  
**DT** BCW67AR SGS R SOT23R pnp 32V 0.8A hfe 100 min  
**DU** BCW67BR SGS R SOT23R pnp 32V 0.8A hfe 160 min  
**DW** BCW67CR SGS R SOT23R pnp 32V 0.8A hfe 250 min  
**DX** BCW68FR SGS R SOT23R pnp 45V 0.8A hfe 100 min  
**DY** BCW68GR SGS R SOT23R pnp 45V 0.8A hfe 160 min  
**DZ** BCW68HR SGS R SOT23R pnp 45V 0.8A hfe 250 min

## Codes beginning with 'E'

**Code Device Manufacturer Base Package Leaded Equivalent/Data**  
**e** BAT64-02W Sie I SCD80 -  
**E** 1SS780 Roh I USM 40V 100mA lo leakage  
**E** BB689 Sie I SCD80 2-55pF varicap  
**E0** HSMP-3810 HP C SOT23 HP3810 pin atten diode  
**E0** HSMP-381B HP C SOT323 HP3810 pin atten diode  
**E01** DTDG14EP Roh P SOT89 npn dtr 60V 1A R2 10k, + c to b zener  
**E02** DTDG23YP Roh P SOT89 npn dtr 60V 1A 2k2+ 10k, + c to b zener  
**E1p** BFS17 Phi N SOT23 BFY90 BFW92  
**E1p** BFS17W Phi N SOT323 BFY90 BFW92  
**E1** HSMP-3811 HP K SOT23 HP3810 pin atten diode  
**E2** BFS17A Phi N SOT23 npn RF 3GHz 25mA  
**E2** BAL99 Zet C - sw diode 75V 100mA  
**E2** HSMP-3812 HP D SOT23 dual series HP3810 pin atten diode

**E3** BAR99 Zet C - sw diode 75V 100mA  
**E3** HSMP-3813 HP A SOT23 dual HP3810 pin atten diode  
**E4** BFS17R Phi R - BFY90 BFW92  
**E4** HSMP-3814 HP B SOT23 dual cc HP3810 pin atten diode  
**E5** BFS17AR Tfk R - npn rf 3 GHz 25mA  
**E6** ZC2800E Zet C - HP2800  
**E8** ZC2811E Zet C - HP2811  
**E9** ZC5800E Zet C - HP5800  
**E11** DTA113ZE Roh N EMT3 pnp dtr 1k0 + 10k 50V 100mA  
**E11** DTA113ZKA Roh N SC59 pnp dtr 1k0 + 10k 50V 100mA  
**E13** DTA143ZE Roh N EMT3 pnp dtr 4k7 + 47k 50V 100mA  
**E13** DTA143ZKA Roh N SC59 pnp dtr 4k7 + 47k 50V 100mA  
**E23** DTC143ZCA Roh N SOT23 npn dtr 4k7 + 47k 50V 100mA  
**E23** DTC143ZE Roh N EMT3 npn dtr 4k7 + 47k 50V 100mA  
**E23** DTC143ZKA Roh N SC59 npn dtr 4k7 + 47k 50V 100mA  
**E32** DTA123JE Roh N EMT3 pnp dtr 2k2 + 47k 50V 100mA  
**E32** DTA123JKA Roh N SC59 pnp dtr 2k2 + 47k 50V 100mA  
**E42** DTC123JE Roh N EMT3 npn dtr 2k2 + 47k 50V 100mA  
**E42** DTC123JKA Roh N SC59 npn dtr 2k2 + 47k 50V 100mA  
**E56** DTA144VKA Roh N SC59 pnp dtr 47k + 10k 50V 100mA  
**E66** DTC144VKA Roh N SC59 npn dtr 47k + 10k 50V 100mA  
**EAs** BCW65A Sie N SOT23 npn 32V 800mA hfe 100 min  
**EBs** BCW65B Sie N SOT23 npn 32V 800mA hfe 160 min  
**EB** HSMP-4810 HP J SOT23 0.5-3GHz pin 2 cathode connections  
**EB** MSC1022-B Mot H - pnp RF 150MHz ft 20V  
**EC** MSC1022-C Mot H - pnp RF 150MHz ft 20V  
**ECs** BCW65C Sie N SOT23 npn 32V 800mA hfe 250 min  
**ED** BCV28 Sie P SOT89 pnp darlington 30V 0.8A comp BCV29  
**EE** BCV48 Sie P SOT89 pnp darlington 60V 0.8A comp BCV49  
**EF** BCV29 Sie P SOT89 npn darlington 30V 0.8A comp BCV28  
**EF** BCW66F Sie N SOT23 npn 45V 800mA hfe 100 min  
**EG** BCV49 Sie P SOT89 npn darlington 60V 0.8A comp BCV48  
**EGs** BCW66G Sie N SOT23 npn 45V 800mA hfe 160 min  
**EHS** BCW66H Sie N SOT23 npn 45V 800mA hfe 240 min  
**EHA** MAX6326\_R22-T Max ZB SOT23 microproc -ve reset gen 2.200V  
**EIA** MAX6327\_R22-T Max ZB SOT23 microproc +ve reset gen 2.200V  
**EJA** MAX6328\_R22-T Max ZB SOT23 microproc -ve reset gen 2.200V  
**EKs** BCX41 Sie N SOT23 gp npn 125V 1A comp BCX42  
**ET** BCW65AR Sie R SOT23R npn 32V 800mA hfe 100 min  
**EU** BCW65BR Sie R SOT23R npn 32V 800mA hfe 160 min  
**EW** BCW65CR Sie R SOT23R npn 32V 800mA hfe 240 min  
**EWAA** MAX6326\_R23-T Max ZB SOT23 microproc -ve reset gen 2.320V  
**EX** BCW65FR Sie R SOT23R npn 45V 800mA hfe 100 min  
**EXAA** MAX6326\_R24-T Max ZB SOT23 microproc -ve reset gen 2.400V  
**EY** BCW65GR Sie R SOT23R npn 45V 800mA hfe 160 min  
**EYAA** MAX6326\_R25-T Max ZB SOT23 microproc -ve reset gen 2.500V  
**EZ** BCW65HR Sie R SOT23R npn 45V 800mA hfe 240 min  
**EZAA** MAX6326\_R26-T Max ZB SOT23 microproc -ve reset gen 2.630V

## Codes beginning with 'F'

### Code Device Manufacturer Base Package Leaded Equivalent/Data

**f** BAS20-02W Sie I SCD80 -  
**F** KV1831E Tok I URD uhf varicap 2.5-22pf  
**F** MRF927 Mot N SOT323 npn RF ft 8GHz  
**F0** HSMP-3820 HP C SOT23 35V RF pin sw diode  
**F02** DTD123TK Roh N SC59 npn dtr R1 2k2 40V 100mA  
**F03** DTD143TK Roh N SC59 npn dtr R1 4k7 40V 100mA  
**F05** TSDF1205 Tfk X - ft 12GHz npn RF 4V 12mA  
**F1** HSMP-3821 HP K SOT23 35V RF pin sw diode  
**F1** BFS18 Phi N SOT23 BF495  
**F1** MMBC1009F1 Mot N - RF npn ft 150MHz hfe30-60  
**F2** HSMP-3822 HP D SOT23 dual series HP3820 pin sw diode  
**F2** BFS19 SGS N SOT23 BF184 BF494  
**F2p** BFS19 Phi N SOT23 BF184 BF494  
**F2t** BFS19 Phi N SOT23 BF184 BF494  
**F3** MMBC1009F3 Mot N - RF npn ft150MHz hfe60-120  
**F4** BFS18R Phi N - BF495  
**F4** HSMP-3824 HP B SOT23 dual cc HP3820 pin sw diode  
**F5** BFS19R Phi N - BF184 BF494  
**F8p** BF824 Phi N SOT23 -  
**F8t** BF824 Phi N SOT23 -

**F8t** BF824W Phi N SOT323 -  
**F11** DTB113EK Roh N SC59 pnp dtr 1k + 1k 50V 500mA  
**F12** DTB123EK Roh N SC59 pnp dtr 2k2 + 2k2 50V 500mA  
**F13** DTB143EK Roh N SOT23 pnp dtr 4k7+ 4k7 50V 500mA  
**F13** DTB143EK Roh N SC59 pnp dtr 4k7+ 4k7 50V 500mA  
**F14** DTB114EK Roh N SC59 pnp dtr 10k + 10k 50V 500mA  
**F20** TSDF1220 Tfk X - fT 12GHz npn 6V 20mA  
**F21** DTD113EK Roh N SC59 npn dtr 1k + 1k 50V 500mA  
**F22** DTD123EK Roh N SC59 npn dtr 2k2 + 2k2 50V 500mA  
**F23** DTD143EK Roh N SOT23 npn dtr 4k7 + 4k7 50V 500mA  
**F23** DTD143EK Roh N SC59 npn dtr 4k7 + 4k7 50V 500mA  
**F24** DTD114EK Roh N SC59 npn dtr 10k + 10k 50V 500mA  
**F52** DTB123YC Roh N SOT23 pnp dtr 2k2 + 10k 50V 100mA  
**F52** DTB123YK Roh N SC59 pnp dtr 2k2 + 10k 50V 100mA  
**F62** DTD123YK Roh N SC59 npn dtr 2k2 + 10k 50V 100mA  
**F92** DTB123TK Roh N SC59 pnp dtr R1 2k2 40V 100mA  
**F93** DTB143TK Roh N SC59 pnp dtr R1 4k7 40V 100mA  
**F94** DTB114TK Roh N SC59 pnp dtr R110k 40V 100mA  
**FA** HSMP-4820 HP B SOT23 0.5-3GHz cc pin dual anode  
**FA** BFQ17 Phi P SOT89 npn RF 1.5GHz 300mA  
**FA** BFP81 Sie X - BFQ69  
**FA** BFQ19 Phi P SOT89 npn RF Ft 5.5GHz 100mA  
**FAAA** MAX6326\_R27-T Max ZB SOT23 microproc -ve reset gen 2.700V  
**FB** BFP17 Sie X BFW92  
**FBA** MAX6328\_R31-T Max ZB SOT23 microproc -ve reset gen 2.800V  
**FC** BFQ64 Sie P - BFT98T  
**FC** BFP29 Sie X - BFT97  
**FCAA** MAX6326\_R29-T Max ZB SOT23 microproc -ve reset gen 2.930V  
**FD** BCV26 SGS N SOT23 pnp darlington  
**FDp** BCV26 Phi N SOT23 pnp darlington  
**FDt** BCV26 Phi N SOT23 pnp darlington  
**FD** BFQ17P Sie P SOT89 BFW16A  
**FD** BFP35A Sie X - BFR34A  
**FDA** MAX6326\_R31-T Max ZB SOT23 microproc -ve reset gen 3.080V  
**FE** BCV46 SGS N SOT23 pnp darlington  
**FEp** BCV46 Phi N SOT23 pnp darlington  
**FEt** BCV46 Phi N SOT23 pnp darlington  
**FEs** BFQ19P Sie P SOT89 BFR96  
**FE** BFP93A Sie X SOT143 BFR91A  
**FEAA** MAX6326\_R30-T Max ZB SOT23 microproc -ve reset gen 3.000V  
**FF** BCV27 SGS N SOT23 npn darlington  
**FF** BBY65-02V Inf I SC79 hyperabrupt varicap 2.7-30pF  
**FFp** BCV27 Phi N SOT23 npn darlington  
**FFt** BCV27 Phi N SOT23 npn darlington  
**FFAA** MAX6327\_R23-T Max ZB SOT23 microproc +ve reset gen 2.320V  
**FG** BCV47 Phi N SOT23 npn darlington  
**FGp** BCV47 Phi N SOT23 npn darlington  
**FGt** BCV47 Phi N SOT23 npn darlington  
**FG** BFQ19S Sie P SOT89 BFR96S  
**FGAA** MAX6327\_R24-T Max ZB SOT23 microproc +ve reset gen 2.400V  
**FHs** BFN24 Sie N SOT23 npn 250V comp to BFN25  
**FHAA** MAX6327\_R25-T Max ZB SOT23 microproc +ve reset gen 2.500V  
**FIAA** MAX6327\_R26-T Max ZB SOT23 microproc +ve reset gen 2.630V  
**FJ** BFN26 Sie N SOT23 npn 300V comp to BFN27  
**FJAA** MAX6327\_R27-T Max ZB SOT23 microproc +ve reset gen 2.700V  
**FK** BFN25 Sie N SOT23 pnp 250V comp to BFN24  
**FKAA** MAX6327\_R28-T Max ZB SOT23 microproc +ve reset gen 2.800V  
**FL** BFN27 Sie N SOT23 pnp 300V comp to BFN26  
**FLAA** MAX6327\_R29-T Max ZB SOT23 microproc +ve reset gen 2.930V  
**FFMA** MAX6327\_R31-T Max ZB SOT23 microproc +ve reset gen 3.080V  
**FFNA** MAX6327\_R30-T Max ZB SOT23 microproc +ve reset gen 3.000V  
**FOAA** MAX6328\_R23-T Max ZB SOT23 microproc -ve reset gen 2.320V  
**FPAA** MAX6328\_R24-T Max ZB SOT23 microproc -ve reset gen 2.400V  
**F-Q** 2PA1576Q Phi N SOT323 gp pnp SC70 hfe 120-270  
**FtQ** 2PA1576Q Phi N SOT323 gp pnp SC70 hfe 120-270  
**FQAA** MAX6328\_R25-T Max ZB SOT23 microproc -ve reset gen 2.500V  
**FR** 2SA1037AK Roh N - hfe 150@1ma preamp pnp  
**FR** 2SA1576A Roh N UMT see 2SA1037K above  
**FR** 2SA1774 Roh N EM3 see 2SA1037K above  
**F-R** 2PA1576R Phi N SOT323 gp pnp hfe 180-390

FtR 2PA1576R Phi N SOT323 gp pnp hfe 180-390  
FRAA MAX6328\_R26-T Max ZB SOT23 microproc -ve reset gen 2.630V  
F-S 2PA1576S Phi N SOT323 gp pnp hfe 270-560  
FtS 2PA1576S Phi N SOT323 gp pnp hfe 270-560  
FSAA MAX6328\_R27-T Max ZB SOT23 microproc -ve reset gen 2.700V  
FTAA MAX6328\_R28-T Max ZB SOT23 microproc -ve reset gen 2.800V  
FUAA MAX6328\_R29-T Max ZB SOT23 microproc -ve reset gen 2.930V  
FVAA MAX6328\_R31-T Max ZB SOT23 microproc -ve reset gen 3.080V  
FWAA MAX6328\_R30-T Max ZB SOT23 microproc -ve reset gen 3.000V  
FZAP MAX6012A Max ZC SOT23 precision reference 1.247V  
FZAQ MAX6025A Max ZC SOT23 precision reference 2.500V  
FZAR MAX6041A Max ZC SOT23 precision reference 4.096V  
FZAS MAX6045A Max ZC SOT23 precision reference 4.500V  
FZAT MAX6050A Max ZC SOT23 precision reference 5.000V  
FZAU MAX6021A Max ZC SOT23 precision reference 2.048V  
FZAV MAX6346\_R33-T Max ZB SOT23 micrproc -ve reset gen 3.300V  
FZAW MAX6346\_R34-T Max ZB SOT23 micrproc -ve reset gen 3.400V  
FZAX MAX6346\_R35-T Max ZB SOT23 micrproc -ve reset gen 3.500V  
FZAY MAX6346\_R36-T Max ZB SOT23 micrproc -ve reset gen 3.600V  
FZAZ MAX6346\_R37-T Max ZB SOT23 micrproc -ve reset gen 3.700V  
FZBA MAX6346\_R38-T Max ZB SOT23 micrproc -ve reset gen 3.800V  
FZBB MAX6346\_R39-T Max ZB SOT23 micrproc -ve reset gen 3.900V  
FZBC MAX6346\_R40-T Max ZB SOT23 micrproc -ve reset gen 4.0800V  
FZBD MAX6346\_R41-T Max ZB SOT23 micrproc -ve reset gen 4.100V  
FZBE MAX6346\_R42-T Max ZB SOT23 micrproc -ve reset gen 4.200V  
FZBF MAX6346\_R43-T Max ZB SOT23 micrproc -ve reset gen 4.300V  
FZBG MAX6346\_R44-T Max ZB SOT23 micrproc -ve reset gen 4.380V  
FZBH MAX6346\_R45-T Max ZB SOT23 micrproc -ve reset gen 4.500V  
FZBI MAX6346\_R46-T Max ZB SOT23 micrproc -ve reset gen 4.630V  
FZBJ MAX6347\_R33-T Max ZB SOT23 micrproc +ve reset gen 3.300V  
FZBK MAX6347\_R34-T Max ZB SOT23 micrproc +ve reset gen 3.400V  
FZBL MAX6347\_R35-T Max ZB SOT23 micrproc +ve reset gen 3.500V  
FZBM MAX6347\_R36-T Max ZB SOT23 micrproc +ve reset gen 3.600V  
FZBN MAX6347\_R37-T Max ZB SOT23 micrproc +ve reset gen 3.700V  
FZBO MAX6347\_R38-T Max ZB SOT23 micrproc +ve reset gen 3.800V  
FZBP MAX6347\_R39-T Max ZB SOT23 micrproc +ve reset gen 3.900V  
FZBQ MAX6347\_R40-T Max ZB SOT23 micrproc +ve reset gen 4.0800V  
FZBR MAX6347\_R41-T Max ZB SOT23 micrproc +ve reset gen 4.100V  
FZBS MAX6347\_R42-T Max ZB SOT23 micrproc +ve reset gen 4.200V  
FZBT MAX6347\_R43-T Max ZB SOT23 micrproc +ve reset gen 4.300V  
FZBU MAX6347\_R44-T Max ZB SOT23 micrproc +ve reset gen 4.380V  
FZBV MAX6347\_R45-T Max ZB SOT23 micrproc +ve reset gen 4.500V  
FZBW MAX6347\_R46-T Max ZB SOT23 micrproc +ve reset gen 4.630V  
FZBX MAX6348\_R33-T Max ZB SOT23 microproc -ve reset gen 3.300V  
FZBY MAX6348\_R34-T Max ZB SOT23 microproc -ve reset gen 3.400V  
FZBZ MAX6348\_R35-T Max ZB SOT23 microproc -ve reset gen 3.500V  
FZCA MAX6348\_R36-T Max ZB SOT23 microproc -ve reset gen 3.600V  
FZCB MAX6348\_R37-T Max ZB SOT23 microproc -ve reset gen 3.700V  
FZCC MAX6348\_R38T Max ZB SOT23 microproc -ve reset gen 3.800V  
FZCD MAX6348\_R39-T Max ZB SOT23 microproc -ve reset gen 3.900V  
FZCE MAX6348\_R40-T Max ZB SOT23 microproc -ve reset gen 4.000V  
FZCF MAX6348\_R41-T Max ZB SOT23 microproc -ve reset gen 4.100V  
FZCG MAX6348\_R42T Max ZB SOT23 microproc -ve reset gen 4.200V  
FZCH MAX6348\_R43-T Max ZB SOT23 microproc -ve reset gen 4.380V  
FZCI MAX6348\_R44-T Max ZB SOT23 microproc -ve reset gen 4.400V  
FZCJ MAX6348\_R45-T Max ZB SOT23 microproc -ve reset gen 4.500V  
FZCK MAX6348\_R46-T Max ZB SOT23 microproc -ve reset gen 4.600V  
FZCW MAZ6001UR Max ZC SOT23 1.250V V reference  
FZCX MAZ6002UR Max L SOT23 2.500V V reference  
FZCY MAZ6004UR Max L SOT23 4.096V V reference  
FZCZ MAZ6005UR Max L SOT23 5.000V V reference  
FZDA MAX6012B Max ZC SOT23 precision reference 1.247V  
FZDB MAX6025B Max ZC SOT23 precision reference 2.500V  
FZDC MAX6041B Max ZC SOT23 precision reference 4.096V  
FZDD MAX6045B Max ZC SOT23 precision reference 4.500V  
FZdE MAX6050B Max ZC SOT23 precision reference 5.000V  
FZDF MAX6021B Max ZC SOT23 precision reference 2.047V  
FZDK MAZ6003UR Max L SOT23 3.000V V reference  
FZDW MAX6030A Max ZC SOT23 precision reference 3.000V  
FZDX MAX6012B Max ZC SOT23 precision reference 3.000V

**FZEB** LM4041AIM3-1.2 Max L SOT23 1.225V 0.1% shunt V ref  
**FZEC** LM4041BIM3-1.2 Max L SOT23 1.225V 0.2% shunt V ref  
**FZED** LM4041DIM3-1.2 Max L SOT23 1.225V 0.5% shunt V ref  
**FZEE** LM4041DIM3-1.2 Max L SOT23 1.225V 1.5% shunt V ref  
**FZEF** LM4040A IM3-2.1 Max L SOT23 2.048V shunt reference 0.1%  
**FZEG** LM4040B IM3-2.1 Max L SOT23 2.048V shunt reference 0.2 %  
**FZEH** LM4040C IM3-2.1 Max L SOT23 2.048V shunt reference 0.5%  
**FZEI** LM4040D IM3-2.1 Max L SOT23 2.048V shunt reference 1.0%  
**FZEJ** LM4040A IM3-2.5 Max L SOT23 2.500V shunt reference 0.1%  
**FZEK** LM4040B IM3-2.5 Max L SOT23 2.500V shunt reference 0.2 %  
**FZEL** LM4040C IM3-2.5 Max L SOT23 2.500V shunt reference 0.5%  
**FZEM** LM4040D IM3-2.5 Max L SOT23 2.500V shunt reference 1.0%  
**FZEN** LM4040A IM3-3.0 Max L SOT23 3.000V shunt reference 0.1%  
**FZEO** LM4040B IM3-3.0 Max L SOT23 3.000V shunt reference 0.2 %  
**FZEP** LM4040C IM3-3.0 Max L SOT23 3.000V shunt reference 0.5%  
**FZEQ** LM4040D IM3-3.0 Max L SOT23 3.000V shunt reference 1.0%  
**FZER** LM4040A IM3-4.1 Max L SOT23 4.096V shunt reference 0.1%  
**FZES** LM4040B IM3-4.1 Max L SOT23 4.096V shunt reference 0.2 %  
**FZET** LM4040C IM3-4.1 Max L SOT23 4.096V shunt reference 0.5%  
**FZEU** LM4040DIM3-4.1 Max L SOT23 4.096V shunt reference 1.0%  
**FZEV** LM4040A IM3-5.0 Max L SOT23 5.000V shunt reference 0.1%  
**FZEW** LM4040B IM3-5.0 Max L SOT23 5.000V shunt reference 0.2 %  
**FZEX** LM4040C IM3-5.0 Max L SOT23 5.000V shunt reference 0.5%  
**FZEY** LM4040D IM3-5.0 Max L SOT23 5.000V shunt reference 1.0%  
**FZEZ** MAZ803LUR Max ZB SOT23 microproc -ve reset gen, 5.0V  
**FZFA** MAZ803MUR Max ZB SOT23 microproc -ve reset gen, 5.0V  
**FZFB** MAZ803TUR Max ZB SOT23 microproc -ve reset gen, 3.3V  
**FZFC** MAZ803SUR Max ZB SOT23 microproc -ve reset gen, 3.3V  
**FZFD** MAZ803RUR Max ZB SOT23 microproc -ve reset gen, 3.0V  
**FZGH** MAZ6006AUR Max L SOT23 1.250V 0.2% shunt V reference  
**FZGI** MAZ6006BUR Max L SOT23 1.250V 0.5% shunt V reference  
**FZGJ** MAZ6006CUR Max L SOT23 1.250V 1.0% shunt V reference  
**FZGK** MAZ6007AUR Max L SOT23 2.480V 0.2% shunt V reference  
**FZGL** MAZ6007BUR Max L SOT23 2.480V 0.5% shunt V reference  
**FZGM** MAZ6007CUR Max L SOT23 2.480V 1.0% shunt V reference  
**FZGN** MAZ6008AUR Max L SOT23 2.500V 0.2% shunt V reference  
**FZGO** MAZ6008BUR Max L SOT23 2.500V 0.5% shunt V reference  
**FZGP** MAZ6008CUR Max L SOT23 2.500V 1.0% shunt V reference  
**FZGQ** MAZ6009AUR Max L SOT23 3.000V 0.2% shunt V reference  
**FZGR** MAZ6009BUR Max L SOT23 3.000V 0.5% shunt V reference  
**FZGS** MAZ6009CUR Max L SOT23 3.000V 1.0% shunt V reference

## Codes beginning with 'G'

### Code Device Manufacturer Base Package Leaded Equivalent/Data

**G** BAR63-02W Sie I SCD80 RF pin to 3GHz  
**G** BAR63-03W Sie I SOD323 RF pin to 3GHz  
**G** KV1181E Tok I URD uhf varicap 2-16pF  
**G** MRF947A Mot N SOT323 npn RF 8GHz  
**G0** HSMP-3890 HP C SOT23 HP3890 pin sw diode  
**G0** HSMP-389B HP C SOT323 HP3890 pin sw diode  
**G08** DTD133HKA Roh N SC59 npn dtr 3k3+10k 50V 500mA  
**G1** BFS20 Phi N SOT23 BF199  
**G1p** BFS20 Phi N SOT23 BF199  
**G1** BFS20 Phi N SOT23 BF199  
**G1t** HSMP-3891 HP K SOT23 HP3890 pin sw diode  
**G1** MMBT5551 Mot N SOT23 2N5551 npn Vce 140V  
**tG1** PMBT5551 Phi N SOT23 2N5551 npn Vce 140V  
**tG1** PMST5551 Phi N SOT323 2N5551 npn Vce 140V  
**G1E** BC847A Rho N SOT23 BC547A  
**G1F** BC847B Rho N SOT23 BC547B  
**G1G** BC847C Rho N SOT23 BC547C  
**G1J** BC848A Rho N SOT23 BC548A  
**G1K** BC848B Rho N SC70 BC548B  
**G1K** BC848B Rho N SOT23 BC548B  
**G1L** BC848C Rho N SOT23 BC548C  
**G2** HSMP-3892 HP D SOT23 dual ser HP3890 pin sw diode  
**G2** CGY50 Sie IQ SOT143 GaAs MMIC amp  
**G3** HSMP-3893 HP A SOT23 dual HP3890 pin sw diode  
**pG3** PMST5551 Phi N SOT323 2N5551  
**G3** BAR63 Sie C SOT23 single 3GHz pin  
**G3C** DTB122JK Roh N SC59 pnp dtr 220R + 470R 50V 500mA

**G3E** BC857A Roh N SOT23 BC557A  
**G3F** BC857B Roh N SOT23 BC557B  
**G3J** BC858A Roh N SOT23 BC558A  
**G3K** BC858B Roh N SOT23 BC558B  
**G3K** BC858B Roh N SC70 BC558B  
**G3L** BC858C Roh N SOT23 BC558C  
**G4** BFS20R Phi N SOT23 BF199  
**G4** HSMP-3894 HP B SOT23 dual HP3890 pin sw diode  
**G4** BAR63-04 Sie D SOT23 dual series 3GHz pin  
**G4C** DTD122JK Roh N SC59 npn dtr 220R + 470R 50V 500mA  
**G4s** BAR63-04W Sie D SOT323 dual series 3GHz pin  
**G5** HSMP-3895 HP S SOT143 dual HP3890 pin sw diode  
**G5** BAR63-05 Sie B SOT23 dual cc 3GHz pin  
**G5s** BAR63-05W Sie B SOT323 dual cc 3GHz pin  
**G5B** BC807-25 Roh N SOT23 BC327-25  
**G6** BAR63-06 Sie A SOT23 dual ca 3GHz pin  
**G6s** BAR63-06W Sie A SOT323 dual ca 3GHz pin  
**G6A** BC817-16 Roh N - BC337-16  
**G6B** BC817-25 Roh N SOT23 BC337-25  
**G7** BF579 Tfk N - BF979 pnp uhf ft 1.75GHz  
**G11** DTB113ZKA Roh N SC59 pnp dtr 1k0 +10k 50V 500mA  
**G21** DTD113ZKA Roh N SC59 npn dtr 1k0 +10k 50V 500mA  
**G98** DTB133HKA Roh N SC59 pnp dtr 3k3+10k 50V 500mA  
**GA** HSMP-4890 HP B SOT23 0.5-3GHz dual cc pin limiter  
**GA** BAW78A Sie LQ SOT89 50V1A sw diode  
**GAB** BCW60B Rho N SOT23 BCY58-viii  
**GAC** BCW60C Rho N SOT23 BCY58-ix  
**GAD** BCW60D Rho N SOT23 BCY58-x  
**GAH** BCX70H Rho N SOT23 BCY59-viii BC107B  
**GAJ** BCX70J Rho N SOT23 BCY59-ix BC107  
**GAK** BCX70K Rho N SOT23 BCY59-x BC107  
**GB** BAW78B Sie LQ SOT89 100V 1A sw diode  
**GBB** BCW61B Rho N SOT23 BCY78-viii  
**GBC** BCW61C Rho N SOT23 BCY78-ix  
**GBG** BCX71G Rho N SOT23 BCY79-vii  
**GBH** BCX71H Rho N SOT23 BCY79-viii  
**GBJ** BCX71J Rho N SOT23 BCY79-ix  
**GC** BAW78C Sie LQ SOT89 200V 1A sw diode  
**GC1** BCW29 Roh N SOT23 BC178A  
**GC2** BCW30 Roh N SOT23 BC178B  
**GD** BAW78D Sie LQ SOT89 400V 1A sw diode  
**GD1** BCW31 Roh N SOT23 BC108C  
**GD2** BCW32 Roh N SOT23 BC108B  
**GD3** BCW33 Roh N SOT23 BC108A  
**GE** BFR35AP Sie N SOT23 BFR34A  
**GE** BAW79A Sie JQ SOT89 dual cc 50V 1A switch diodes  
**GEC** BCW65C Rho N SOT23 npn 32V 800mA hfe 250 min  
**GF** BFR92P Sie N SOT23 BFR90  
**GF** BAW79B Sie JQ SOT89 dual cc 100V 1A switch diodes  
**GG** BF579R Tfk R - BF979 pnp uhf ft1.75GHz  
**GG** BFR93P Sie N SOT23 BFR91A  
**GG** BAW79C Sie JQ SOT89 dual cc 200V 1A switch diodes  
**GH** BAW79D Sie JQ SOT89 dual cc 400V 1A switch diodes  
**GH1** BCW69 Roh N SOT23 BC177A  
**GH2** BCW70 Roh N SOT23 BC177B  
**GK1** BCW71 Roh N SOT23 BC107A  
**GK2** BCW72 Roh N SOT23 BC107B ZXT300  
**GLP** MMBT1010 Mot N SOT23 pnp 15V hfe 300-600 @100mA  
**GLP** MMBT1010 Mot N SOT346 pnp 15V hfe 300-600 @100mA  
**GMA** BFS17 Roh N SOT23 BFW92  
**GT1** BCX17 Roh N SOT23 BC327  
**GT2** BCX18 Roh N SOT23 BC328  
**GU1** BCX19 Roh N SOT23 BC337  
**GU2** BCX20 Roh N SOT23 BC338

### Codes beginning with 'H'

**Code Device Manufacturer Base Package Leaded Equivalent/Data**  
**H** MRF947B Mot N SOT323 npn RF 8GHz  
**H** BB659C Sie I SCD80 2.5-39 pF varicap in  
**H** BBY51-03W Sie I SOD323 3-5 pF varicap in  
**H02** DTC323TU Rho N SC70 npn dtr 15V 0.6A, R1 2k2 , for muting

**H04** DTC323TU Rho N SC70 npn dtr 15V 0.6A, R1 10k , for muting  
**H1** BCW69 Phi N SOT23 BC177A  
**H1p** BCW69 Phi N SOT23 BC177A  
**H1t** BCW69 Phi N SOT23 BC177A  
**H2** BCW70 Phi N SOT23 BC177B  
**H2p** BCW70 Phi N SOT23 BC177B  
**H2t** BCW70 Phi N SOT23 BC177B  
**H3** BCW89 Phi N SOT23 BC556  
**H3p** BCW89 Phi N SOT23 BC556  
**H3t** BCW89 Phi N SOT23 BC556  
**H4** BCW69R Phi R SOT23R BC177A  
**H5** BCW70R Phi R SOT23R BC177B  
**H5** MBD770DW Mot DL - Dual UHF schottky diode  
**H6** BCW89R Phi R SOT23R BC556  
**H11** UMH11TN Roh DI - npn/pnpdtr pair 10k+10k  
**H16** SST4416 Sil F - 2N4416 n-ch jfet  
**H27** DTC323TU Rho N SC70 npn dtr 15V 0.6A, R1 6k8 , for muting  
**H31** BCW89R Phi N SOT23R BC556  
**H84** SST5484 Sil F SOT23 2N5484  
**H85** SST5485 Sil F SOT23 2N5485  
**H86** SST5486 Sil F SOT23 2N5486  
**HB** BFN22 SGS P SOT23 npn Vce 250V  
**HC** BFN23 SGS P SOT23 pnp Vce 250V  
**HG** CFY77-08 Sie DM - 20GHz HEMT 0.8dB nf  
**HH** CFY77-10 Sie DM - 20GHz HEMT 1.0 dB nf  
**HH** BBY51-07 Sie S SOT143 dual varicap like BBY51  
**HQ** 2SA1036K Roh N - pnp 500mA driver

### Codes beginning with 'I'

**Code Device Manufacturer Base Package Leaded Equivalent/Data**  
**I** BBY51-02W Sie I SCD80 3-5 pF varicap  
**I** BBY52-03W Sie I SOD323 1.25-1.75 pF varicap in  
**I08** SST108 Sil F SOT23 J108 n-ch jfet  
**I09** SST109 Sil F SOT23 J109 n-ch jfet  
**I10** SST110 Sil F SOT23 J110 n-ch jfet

### Codes beginning with 'J'

**Code Device Manufacturer Base Package Leaded Equivalent/Data**  
**J0** HSMS-2840 HP C SOT23 schottky diode  
**J01** SO2906R - N - 2N2906  
**J03** SO2907AR - R - 2N2907A  
**J05** SO2907R - R - 2N2907  
**J1** HSMS-2841 HP K SOT23 schottky diode  
**J1** ZC830 Zet C ZC820 varicaps  
**J1** BSS138L Mot M SOT23 n-ch enh TMOS fet  
**J1A** ZC830A Zet C SOT23 varicap hyperabrupt 28V 10pF@2V  
**J1B** ZC830B Zet C SOT23 varicap hyperabrupt 28V 10pF@2V  
**pJ1** BSH101 Phi M SOT23 n-ch 60V 0.7A mosfet  
**pJ2** BSH102 Phi M SOT23 n-ch 30V 1A mosfet  
**J2** ZC833 Zet C SOT23 ZC823  
**J2A** ZC833A Zet C SOT23 varicap hyperabrupt 28V 33pF@2V  
**J2B** ZC833B Zet C SOT23 varicap hyperabrupt 28V 33pF@2V  
**pJ3** BSH103 Phi M SOT23 n-ch 30V 0.8A mosfet  
**J3** ZC831 Zet C SOT23 ZC821  
**J3A** ZC831A Zet C SOT23 varicap hyperabrupt 28V 15pF@2V  
**J3B** ZC831B Zet C SOT23 varicap hyperabrupt 28V 15pF@2V  
**J3D** MSB81T1 Mot - vhf pnp fT 0.6GHz  
**J4A** MBV109 Mot C SOT23 29pF VHF varicap diode  
**J4** ZC832 Zet C SOT23 ZC823  
**J4A** ZC832A Zet C SOT23 varicap hyperabrupt 28V 22pF@2V  
**J4B** ZC832B Zet C SOT23 varicap hyperabrupt 28V 22pF@2V  
**J5** ZC834 Zet C SOT23 ZC824  
**J5A** ZC834A Zet C SOT23 varicap hyperabrupt 28V 47pF@2V  
**J5B** ZC834B Zet C SOT23 varicap hyperabrupt 28V 47pF@2V  
**J6** M1MA174 Mot C - gp Si diode 100V  
**J6** ZC835 Zet C SOT23 ZC825  
**J6A** ZC835A Zet C SOT23 varicap hyperabrupt 28V 68pF@2V  
**J6B** ZC835B Zet C SOT23 varicap hyperabrupt 28V 68pF@2V  
**J7** ZC836 Zet C SOT23 ZC826  
**J7A** ZC830A Zet C SOT23 varicap hyperabrupt 28V 100pF@2V  
**J7B** ZC830B Zet C SOT23 varicap hyperabrupt 28V 100pF@2V

**J8** BCX71JR Phi R SOT23R BCY79-ix  
**J9A** ZC829A Zet I SOT23 varicap hyperabrupt 28V 8.2pF@2V  
**J9B** ZC829B Zet I SOT23 varicap hyperabrupt 28V 8.2pF@2V  
**J12** SO2906AR - R - 2N2906A  
**J32** SO5400R SGS R - 2N5400  
**J33** SO5401R SGS R - 2N5401  
**J39** SO692R SGS - - pnp Vce 300V  
**JA** BAV74 Zet B SOT23 dual diode cc 50V 0.1A  
**JA** BAV74 Mot B SOT23 dual sw diodes  
**JBs** BAR74 Sie C SOT23 fast sw diode 50V 0.25A  
**JCs** BAL74 Sie V SOT23 fast sw diode 50V 0.25A  
**JFs** BAL99 Sie V SOT23 fast sw diode 70V 0.25A  
**JG** BAR99 Sie E - fast sw diode 70V 0.25A  
**JKs** BF1009 Sie W SOT143 biased n-ch dg mosfet 1GHz 9V  
**JLs** BF1009S Sie W SOT143 biased n-ch dg mosfet 1GHz 9V  
**JL** MRF949 Mot N SOT323 npn RF fT 9GHz  
**JP**s BAS19 Sie C SOT23 120V 250mA fast sw diode  
**JP**s BAW101 Sie S SOT143 pair isolated 300V sw diodes  
**JRs** BAS20 Sie C SOT23 150V 250mA fast sw diode  
**JS**s BAS21 Sie C SOT143 200V 250mA fast sw diode  
**JS** BAW100 Sie Y SOT143 dual isolated fast sw diodes  
**JTs** BAS28 Sie S SOT143 dual isolated fast sw diodes  
**JTs** BAS28W Sie FQ SOT343 dual isolated fast sw diodes  
**JV** BAS116 Sie C SOT23 250V 75mA Ir 5nA  
**JX** BAV170 Mot B SOT23 dual cc Si diode low Ir  
**JY** BAV199 Mot D SOT23 dual series Si diode low Ir  
**JZ** BAW156 Mot A SOT23 dual ca Si diode low Ir

### Codes beginning with 'K'

**Code Device Manufacturer Base Package Leaded Equivalent/Data**

**K** BAT68-03W Sie I SOD323 BAT68 Schottky  
**K** BBY52-02W Sie I SCD80 UHF varicap 1.75-1.25pF  
**K** MRF917 Mot N SOT323 npn RF fT 6GHz  
**K0** HSMP-3830 HP C SOT23 gp pin diode HP3830  
**K1** HSMP-3831 HP K SOT23 gp pin diode HP3830  
**K1p** BCW71 Phi N SOT23 BC107A  
**K1t** BCW71 Phi N SOT23 BC107A  
**K1** BCW71 Phi N SOT23 BC107A  
**K2p** BCW72 Phi N SOT23 BC107B ZXT300  
**K2t** BCW72 Phi N SOT23 BC107B ZXT300  
**K2** BCW72 Phi N SOT23 BC107B ZXT300  
**K2** HSMP-3832 HP D SOT23 dual HP3830 pin diode  
**K3** HSMP-3833 HP A SOT23 dual HP3830 pin diode  
**K3** BCW81 Phi N SOT23 npn 50V 0.1A 0.2W hfe 420  
**K3p** BCW81 Phi N SOT23 npn 50V 0.1A 0.2W hfe 420  
**K3t** BCW81 Phi N SOT23 npn 50V 0.1A 0.2W hfe 420  
**K4** BCW71R Phi R SOT23R BC107A  
**K4** HSMP-3834 HP B SOT23 dual HP3830 pin diode  
**K5** BCW72R Phi R SOT23R BC107B ZTX300  
**K6** BCV71R Phi R SOT23R BC546A  
**K7** BCV71 Phi N SOT23 BC546A  
**K7p** BCV71 Phi N SOT23 BC546A  
**K7t** BCV71 Phi N SOT23 BC546A  
**K8** BCV72 Phi N SOT23 BC546B  
**K8p** BCV72 Phi N SOT23 BC546B  
**K8t** BCV72 Phi N SOT23 BC546B  
**K9** BCV72R Phi R SOT23R BC546B  
**K14** DTA114GE Roh N EMT3 pnp dtr 50V 100mA R2 10k  
**K14** DTA114GUA Roh N SC70 pnp dtr 50V 100mA R2 10k  
**K14** DTA114GKA Roh N SC59 pnp dtr 50V 100mA R2 10k  
**K15** DTA124GKA Roh N SC59 pnp dtr 50V 50mA R2 22k  
**K16** DTA144GUA Roh N SC70 npn dtr 50V 100mA R2 47k  
**K16** DTA144GKA Roh N SC59 npn dtr 50V 100mA R2 47k  
**K19** DTA115GUA Roh N SC70 npn dtr 50V 100mA R2 100k  
**K19** DTA115GKA Roh N SC59 npn dtr 50V 100mA R2 100k  
**K24** DTC114GUA Roh N SC70 npn dtr 50V 100mA R2 22k  
**K24** DTC114GKA Roh N SC59 npn dtr 50V 100mA R2 22k  
**K25** DTA124GUA Roh N SC70 pnp dtr 50V 50mA R2 22k  
**K25** DTA124GKA Roh N SC59 pnp dtr 50V 50mA R2 22k  
**K26** DTC144GE Roh N EMT3 npn dtr 50V 100mA R2 47k  
**K26** DTC144GUA Roh N SC70 npn dtr 50V 100mA R2 47k

**K26** DTC144GKA Roh N SC59 npn dtr 50V 100mA R2 47k  
**K29** DTC115GUA Roh N SC70 npn dtr 50V 100mA R2 100k  
**K29** DTC115GKA Roh N SC59 npn dtr 50V 100mA R2 100k  
**K31** BCW81R Phi R - npn 50V 0.1A 0.2W hfe 420  
**KB** MMBT8099L Mot N SOT23 npn 80V gp  
**KC** BFQ29P Sie N - BFT66  
**KM** BST80 Phi T - VN10  
**KN** BST84 Phi T - Nch VMOS 200V 0.25A  
**KO** BST86 Phi T - nch VMOS 180V 0.3A

## Codes beginning with 'L'

### Code Device Manufacturer Base Package Leaded Equivalent/Data

**L** BAT62-03W Sie I SOD323 BAT62 schottky detector  
**L** BBY53-02W Sie I SCD80 varicap 5.3-2.2 pF  
**L0** HSMP-386B HP C SOT323 gp RF pin diode  
**L0** HSMP-3860 HP C SOT23 dual series pin diode  
**L0** BAT721S Phi C SOT23 dual series 40V 200mA schottky  
**L05** ZLLS500 Zet C SOT23 schottky 40V 0.7A low leakage high temp  
**L1** BSS65 Zet N - pnp 12V 0.1A 400MHz sw  
**L10** ZLLS1000 Zet C SOT23 schottky 40V 1.1A low leakage high temp  
**L2** HSMP-3862 HP D SOT23 dual RF pin diode  
**L2** BSS69 Zet N - pnp 40V 0.1A 200MHz sw  
**L3** BSS70 Zet N - pnp 40V 0.1A 200MHz sw  
**L3** MMBC1623L3 Mot N - npn 40V gp  
**L3** HSMP-3863 HP A SOT23 ca gp RF pin diode  
**L4** HSMP-3864 HP B SOT23 cc gp RF pin diode  
**L4** BAT54W Phi C SOT323 BAT85 schottky  
**L4p** BAT54 Phi C SOT23 BAT85 schottky  
**L4Z** BAT54 Zet C SOT23 BAT85 schottky  
**L4** MMBC1623L4 Mot N - npn 40V gp  
**L5** BSS65R Zet R - pnp 12V 0.1A 400MHz sw  
**L5** MMBC1623L5 Mot N - MPS3904 hfe 135-270  
**L6** BAR17 Sie C - pin diode  
**L6** BSS69R Zet N - pnp 40V 0.1A 200MHz sw  
**L6** MMBC1623L6 Mot N - MPS3904 hfe 200-400  
**L7** BSS70R Zet N - pnp 40V 0.1A 200MHz sw  
**L7** MMBC1623L7 Mot N - MPS3904 hfe 300-600  
**L7** BAR14-1 Sie D - dual pin 100mA max  
**L8** BAT721A Phi A SOT23 dual c anode 40V 200mA schottky  
**L8** BAR15-1 Sie A - dual pin 100mA max  
**L9** BAT721C Phi B SOT23 dual c cathode 40V 200mA schottky  
**L9** BAR16-1 Sie B - dual pin 100mA max  
**L14** DTB114GK Rho N SC59 pnp dtr 0.5A, R2 10k  
**L20** BAS29 Nat C SOT23 Si diode 120V 50mA  
**L21** BAS31 Nat D SOT23 dual BAS29 diodes  
**L22** BAS35 Nat A SOT23 dual BAS29 diodes  
**L14** DTD114GK Rho N SC59 npn dtr 0.5A, R2 10k  
**L30** BAV23 Phi S SOT143 dual 200V 225mA diodes  
**L41** BAT74 Phi S SOT143 2x BAT85  
**L42p** BAT54A Phi A SOT23 dual c anode schottky  
**L43p** BAT54C Phi B SOT23 dual c cathode schottky  
**L44p** BAT54S Phi D SOT23 dual series schottky  
**L51** BAS56 Phi S SOT143 dual 60V 200mA diodes  
**LAp** BF550 Phi N SOT23 pnp 40V 25mA  
**LB** S525T Tfk G - n-ch vhf mosfet 200MHz  
**LBs** BF999 Sie G SOT23 n-ch vhf mosfet 300MHz  
**LDs** BF543 Sie G SOT23 n-ch vhf mosfet 300MHz  
**LEs** BF660 Sie N SOT23 BF606A pnp vhf osc fT 800MHz  
**LGs** BF775A Sie N SOT23 npn RF fT 5.6GHz for IF amp  
**LHs** BF569 Sie N SOT23 BF970 pnp RF  
**LKs** BF799 Sie N SOT23 BF959  
**LKs** BF799W Sie N SOT323 BF959  
**LH** BF569R Tfk R - BF970 pnp RF  
**LM** BST120 Phi T - p-ch DMOSfet 60V 0.3A  
**LN** BST122 Phi T - p-ch DMOSfet 50V 0.25A  
**LKs** BF799 Sie N SOT23 BF959  
**LKs** BF799W Sie N SOT323 BF959  
**LOs** BF775 Sie N SOT23 BFQ69  
**LOs** BF775W Sie N SOT323 BFQ69  
**LRs** BF517 Sie T SOT23 BF763 2.5 GHz  
**LSs** BF770A Sie N SOT23 npn low noise RF, Ft 6GHz

## Codes beginning with 'M'

### Code Device Manufacturer Base Package Leaded Equivalent/Data

**M (blue)** BAR65-03W Sie I SOD323 pin diode  
**M (white)** BBY55-03W Sie I SOD323 5.4-2.3pF varicap in  
**M** BAR64-02W Sie I SCD80 pin diode  
**M** BAR65-07 Sie S SOT143 dual pin diode  
**M08** PMBFJ308 Phi F SOT23 VHF n-ch JFET J308  
**M09** PMBFJ309 Phi F SOT23 VHF n-ch JFET J309  
**M10** PMBFJ310 Phi F SOT23 VHF n-ch JFET J310  
**M1** BFR30 Phi F SOT23 BFW11 BF245  
**M1B** MMBT2222L Mot N SOT23 2N2222  
**M1E** MMBTA43L Mot N SOT23 MPSA43 200V Vce npn  
**M1F** MMBT5550L Mot N SOT23 2N5550 npn 140V  
**M1J** MMBT2369L Mot N SOT23 2N2369A  
**M2** BFR31 Phi F SOT23 BFW12 BF245  
**M2B** MMBT2907L Mot N SOT23 2N2907 pnp gp  
**M2C** MMBTA70L Mot N SOT23 gp pnp MPSA70  
**M3** BFT46 Phi F SOT23 n-ch fet gp low level amp  
**M3** MMBA812M3 Mot N - 2N5086 hfe 60-120 pnp  
**M3A** MMBTH24L Mot N SOT23 npn VHF amp 400MHz fT 30V  
**M3B** MMBT918L Mot N SOT23 2N918 UHF amp  
**M3J** MMBTH69L Mot N SOT23 pnp VHF amp 2GHz fT 15V  
**M4** BSR56 Phi F - 2N4856 n-ch fet  
**M4** MBD110DW Mot DL SOT363 dual UHF schottky  
**M4A** MMBV109 Mot C SOT323 Hyperabrupt varicap  
**M4B** MMBV432 Mot B SOT23 dual cc varicap 45pF/2V  
**M4C** MMBV3102 Mot C SOT23 Hyperabrupt varicap  
**M4E** MMBV105G Mot C SOT23 Hyperabrupt varicap  
**M4F** MMBD353 Mot D SOT23 dual MBD101 in series  
**M4G** MMBV2101 Mot C SOT23 varicap 6.8pF MV2101  
**M5** BSR57 Phi F - 2N5457 n-ch fet  
**M5** MMBA812M5 Mot N - 2N5086 hfe 135-270 pnp  
**M5C** MMBD7000 Mot D SOT23 100V 2x series sw diodes  
**M5** MMBD352W Mot Z SOT323 2x MBD101 in series  
**M6** BSR58 Phi F SOT23 2N4858 n-ch fet  
**M6** MMBA812M6 Mot N - 2N5086 hfe 200-400 pnp  
**M6** BSS66 Zet N - npn 40V 0.1A sw fT 250MHz  
**M6A** MMBF4416 Mot F SOT23 2N4416 n-ch rf jfet  
**M6B** MMBF5484 Mot F SOT23 2N5484 n-ch rf jfet  
**M6C** MMBFU310 Mot F SOT23 U310 n-ch rf jfet  
**M6E** MMBF5460 Mot F SOT23 2N5460 n-ch rf jfet  
**M6H** MMBD354 Mot A SOT23 dual MBD101 cc  
**M7** BSS67 Zet N - npn 40V 0.1A sw fT 300MHz  
**M7** MMBA812M7 Mot N - 2N5086 hfe 300-600 pnp  
**M8** BSS66R Zet R - npn 40V 0.1A sw fT 250MHz  
**M8** BSH103 Phi M SOT23 n-ch 50V 0.11A mosfet  
**M8p** BSN20 Phi M SOT23 n-ch 50V 0.11A mosfet  
**M9** BSS67R Zet R - npn 40V 0.1A sw fT 300MHz  
**M10** PMBFJ310 Phi F SOT23 J310 n-ch jfet  
**M31** BSD20 Phi XQ - n-ch depl sw mosfet 10V  
**M32** BSD22 Phi XQ - n-ch depl sw mosfet 20V  
**M56** BF1100 Phi W SOT143 dg mosfet 14V 30mA 0.2W  
**M57** BF1100R Phi UQ SOT143R dg mosfet 14V 30mA 0.2W  
**M74** BSS83 Phi XQ - n-ch enh sw mosfet  
**M89** BF989 Phi K - BF960  
**M90** BF990 Phi W - BF980  
**M91** BF991 Phi W - BF981  
**M92** BF992 Phi W - BF982  
**M94** BF994 Phi W - BF964  
**M96** BF996 Phi W - BF966  
**M97** BFR101A - - - -  
**M98** BFR101B - - - -  
**MA** M1MA151AT Mot E SOT346 40V 100mA sw diode  
**MA** MBT3904DW1 Mot DN SOT363 dual 2N3904  
**MA** M1MA152AT Mot E SOT346 80V 100mA sw diode  
**MA** BFS17 - N SOT23 BFW92  
**MB** BF995 Sie W - n-ch vhf dg mosfet BF961  
**MB** MBT3904DW9 Mot - - dual 2N3904  
**MCs** BFS17P Sie N SOT23 BFW92  
**MCs** BFS17PW Sie N SOT323 BFW92

**MC** ZVN3306F Zet M SOT23 n-ch mosfet 60V 150mA  
**MF** ZVN3310F Zet M SOT23 n-ch mosfet 100V 100mA  
**MG** BF994S Tfk W - BF964 n-ch dg vhf mosfet  
**MH** BF996S Tfk W - BF966 n-ch dg vhf mosfet  
**MH** M1MA141KT Mot C SOT323 40V 100mA sw diode  
**MH** M1MA151KT Mot C SOT346 40V 100mA sw diode  
**MI** M1MA142KT Mot C SOT323 80V 100mA sw diode  
**MI** M1MA152KT Mot C SOT346 80V 100mA sw diode  
**ML** ZVP3306F Zet M SOT23 p-ch mosfet 60V 90mA  
**MN** M1MA141WA Mot A SOT323 d diode ca 40V 100mA  
**MN** M1MA151WA Mot A SOT346 d diode ca 40V 100mA  
**MO** M1MA142W Mot A SOT323 d diode ca 80V 100mA  
**MO** M1MA152W Mot A SOT346 d diode ca 80V 100mA  
**MOs** BF998 Sie W SOT143 n-ch vhf dg mosfet BF988  
**MOR** BF998R Tfk UQ SOT143R n-ch vhf dg mosfet BF988  
**MR** BF998W Sie UQ SOT343 n-ch vhf dg mosfet BF988  
**MR** ZVP3310F Zet M SOT23 p-ch mosfet 100V 75mA  
**MS** CF739 Sie W - dg GaAsfet 2GHz  
**MT** M1MA141WK Mot B SOT323 dual diode cc 40V 100mA  
**MT** M1MA151WK Mot B SOT346 dual diode cc 40V 100mA  
**MU** M1MA142WK Mot B SOT323 dual diode cc 80V 100mA  
**MU** M1MA152WK Mot B SOT346 dual diode cc 80V 100mA  
**MU** ZVN3320F Zet M SOT23 n-ch mosfet 200V 60mA  
**MX** CF750 Sie U - biased dg GaAsfet, 3-6V  
**MY** VN10LF Zet M SOT23 n-ch mosfet 60V 150mA  
**MY** BF1012 Sie W - n-ch dg mosfet 1GHz 12V  
**MZ** ZVN4106F Zet M SOT23 n-ch mosfet 60V 200mA  
**MZ** BF1005 Sie W - n-ch dg mosfet 1GHz 5V

## Codes beginning with 'N'

### Code Device Manufacturer Base Package Leaded Equivalent/Data

**N** DAN202K Roh B - 80V 100mA dual diode  
**N0** TN0200T Nat M SOT23 n-ch mosfet 0.6A Id  
**N1** MMBT100 Nat N - npn gp sw 500mA  
**N1** MMBF201N Mot M SOT23 n-ch tmosfet 20V 0.3A Id  
**N1** MRF571 Mot N SOT416 8 GHz 40mA npn RF  
**N1** TN0201T Tem M SOT23 n-ch mosfet 0.3A Id 0.2W  
**N2** MGSF1N02LT1 Mot M SOT23 n-ch mosfet, 20V 85mA  
**N2** MMBC1653N2 Mot N - npn 130V 50mA hfe 50-130  
**N2** BFS520 Phi N SOT323 npn RF 9GHz 70mA  
**N3** MMBC1653N3 Mot N - npn 130V 50mA hfe 100-220  
**N3** MGSF1N03L Mot M SOT23 n-ch TMOS mosfet 30V 0.75A  
**N4** MMBC1653N4 Mot N - npn 130V 50mA hfe 150-330  
**N5** MMBC1654N5 Mot N - npn 160V 50mA hfe 50-130  
**N6** MMBC1653N6 Mot N - npn 160V 50mA hfe 100-220  
**N6** BFS25A Phi N SOT323 npn RF 5GHz 6.5mA 32 mW  
**N7** MMBC1653N7 Mot N - npn 160V 50mA hfe 150-330  
**N9** DAN222 Mot B SOT416 dual cc si diode  
**N05** SO2484 SGS N - 2N2484  
**N08** SO930 SGS N - 2N930  
**N10** SO918 SGS N - 2N918  
**N11** SO2369 SGS N - 2N2369  
**N12** SO2221 SGS N - 2N2221  
**N13** SO2222 SGS N - 2N2222  
**N18** SO1711 SGS N - 2N1711  
**N20** SO2222A SGS N - 2N2222A  
**N27** SO1893 SGS N - 2N1893  
**N28** BFR520 Phi N SOT23 npn RF 9GHz 70mA  
**N29** BFR540 Phi N SOT23 npn RF 9GHz 120mA  
**N30** BFR505 Phi N SOT23 npn RF 9GHz 15V 18mA  
**N33** BFG505 Phi TQ SOT143 npn RF 9GHz 15V 18mA  
**N36** BFG520 Phi X SOT143 npn RF 9GHz 70mA  
**N37** BFG540 Phi X SOT143 npn RF 9GHz 120mA  
**N38** BFG590 Phi TQ SOT143 npn RF 5GHz 15V 0.2A  
**N39** BFG505X Phi X - npn RF 9GHz 15V 18mA  
**N44** BFG590X Phi X - npn RF 5GHz 15V 0.2A  
**N54** SO2221A SGS N - 2N2221A  
**N70** BFG10 Phi TQ SOT143 npn 8V 250mA 1.8GHz pwr amp  
**N71** SO3904 SGS N - 2N3904  
**N71** BFG10X Phi X - 8V 250mA 1.8GHz pwr amp  
**N72** BFG11 Phi TQ SOT143 8V 400mA 1.8GHz pwr amp

N72 SO3903 SGS N - 2N3903  
N73 BFG11X Phi X - 8V 400mA 1.8GHz pwr amp  
N79 SO5550 SGS N - 2N5550  
N80 SO5551 SGS N - 2N5551  
N81 SO2369A SGS N - 2N2369A  
N91 SO642 SGS N - npn Vce 300V  
N94 SO517 SGS N - npn darlington  
NA CFY35-20 Sie DM - 10GHz GaAsfet  
NB CFY35-23 Sie DM - 10GHz GaAsfet  
NY BF1012s Sie W - n-ch dg mosfet 1GHz 12V  
NZ MGSF1N02L Mot M - n-ch TMOS FET

### **Codes beginning with 'O'**

#### **Code Device Manufacturer Base Package Leaded Equivalent/Data**

**O (white)** BAT14-03W Sie I SOD323 RF Schottky 4V 90mA  
**O05** SO2484R SGS R - 2N2484  
**O08** SO930R SGS R - 2N930  
**O10** SO918R SGS R - 2N918  
**O12** SO2221R SGS R - 2N2221  
**O13** SO2222R SGS R - 2N2222  
**O2** BST82 Phi M SOT23 n-ch mosfet 80V 175mA  
**O20** SO2222AR SGS R - 2N2222A  
**O27** SO1893R SGS R - 2N1893  
**O54** SO2221AR SGS R - 2N2221A  
**O79** SO5550R SGS R - 2N5550  
**O80** SO5551R SGS R - 2N5551  
**O91** SO642R SGS R - npn Vce 300V

### **Codes beginning with 'P'**

#### **Code Device Manufacturer Base Package Leaded Equivalent/Data**

**P (white)** BAT15-03W Sie I SOD323 RF Schottky 4V 100mA  
**P** KV1841E Tok I URD uhf varicap 7-15pF  
**P** DAP202K Roh A - 80V 100mA dual  
**P0** BFP90A Phi CX SOT173 BFG90A  
**P0** TP0101T Tem M SOT23 p-ch mosfet 0.5A 12V  
**P0** HSMS-285B HP C SOT323 zero-bias schottky diode uW det  
**P0** HSMS-2850 HP C SOT23 zero-bias schottky diode uW det  
**P01** SO2906 SGS N - 2N2906  
**P01** SST201 Sil F SOT23 J201 n-ch fet  
**P02** SST202 Sil F SOT23 J202 n-ch fet  
**P03** SO2907A SGS N - 2N2907A  
**P03** SST203 Sil F SOT23 J203 n-ch fet  
**P04** SST204 Sil F SOT23 J204 n-ch fet  
**P05** SO2907 SGS N - 2N2907  
**P06** SO2894 SGS N - 2N2894  
**P1** BFP91A Phi CX SOT173 BFG91A  
**P1** SST201 Tem F SOT23 J201 n-ch jfet  
**P1D** PZTA42 Mot P - MPSA42 10mA 300V npn  
**P1F** PZT2222A Mot P - 2N2222A sw npn  
**P1N** PZTA14 Mot P - MPSA14 darlington  
**P1** BFR92 Phi N SOT23 BFR90  
**P1D** PZTA42 Mot P - MPSA42 300V npn  
**P1N** PZTA14 Mot P - npn darlington MPSA14  
**P2** BFR92A Phi N SOT23 BFR90A  
**P2p** BFR92AW Phi N SOT323 BFR90A  
**P2** HSMSM-285C HP D SOT323 dual series HSMS-285B  
**P2** HSMSM-2852 HP D SOT23 dual series HSMS-285B  
**P2D** PZTA92 Mot P - MPSA92 300V pnp  
**P2F** PZT2907A Mot P - 2N2907A sw pnp  
**P2V** PZTA64 Mot P - MPSA64 darlington  
**P3** MMBF2202P Mot M SOT23 p-ch TMOSfet 0.3A 20V  
**P3** TP0202T Tem M - p-ch mosfet 0.3A 20V  
**P4** BFR92R Phi R SOT23R BFR90  
**P5** BFR92AR Phi R SOT23R BFR90A  
**P5** FMMT2369A Zet N - 2N2369A  
**P5** HSMSM-2855 HP S SOT143 separate pair HSMS-2850  
**P6** BFP96 Phi CX SOT173 BFG96  
**P8A** FLLED258 Zet B SOT23 low leakage dual ca Si diode  
**P9** BCX70KR Phi R SOT23R BCY59-x  
**P9** DAP222 Mot A SOT416 dual ca sw diode  
**P12** SO2906A SGS N - 2N2906A

**P25** SO3906 SGS N - 2N3906  
**P26** SO3905 SGS N - 2N3905  
**P32** SO5400 SGS N - 2N5400  
**P33** SO5401 SGS N - 2N5401  
**P38** SST4338 Sil F SOT23 2N4338  
**P39** SST4339 Sil F - 2N4339  
**P39** SO692 SGS - pnp Vce 300V  
**P40** SST4340 Sil F SOT23 2N4340  
**P41** SST4341 Sil F SOT23 2N4341  
**P57** SST5457 Sil F SOT23 2N5457  
**P58** SST5458 Sil F SOT23 2N5458  
**P59** SST5459 Sil F SOT23 2N5459  
**P60** SST5460 Sil F SOT23 2N5460  
**P61** SST5461 Sil F SOT23 2N5461  
**P62** SST5462 Sil F SOT23 2N5462  
**P63** SST5463 Sil F SOT23 2N5463  
**P64** SST5464 Sil F SOT23 2N5464  
**P65** SST5465 Sil F SOT23 2N5465  
**PC** MGSF1P02L Mot M SOT23 p ch enh tmosfet  
**PD** BSS84L Mot M SOT23 p-ch enh tmosfet  
**PH2** SST4302 Sil F SOT23 2N4302  
**PH3** SST4303 Sil F SOT23 2N4303  
**PH4** SST4304 Sil F SOT23 2N4304  
**PL** BB149A Phi I SOD323 2-18pF varicap  
**POs** BAR64 Sie C SOT23 single 200V RF pin  
**PPs** BAR64-04 Sie D SOT23 dual series 200V RF pin  
**PPs** BAR64-04W Sie D SOT323 dual series 200V RF pin  
**PRs** BAR64-05 Sie B SOT23 dual cc 200V RF pin  
**PRs** BAR64-05W Sie B SOT323 dual cc 200V RF pin  
**PSs** BAR64-06 Sie A SOT23 dual ca 200V RF pin  
**PSs** BAR64-06W Sie A SOT323 dual ca 200V RF pin

### Codes beginning with 'Q'

**Code Device Manufacturer Base Package Leaded Equivalent/Data**

**Q3** MMBC1321Q3 Mot N - npn VHF amp fT 0.6GHz  
**Q4** MMBC1321Q4 Mot N - npn VHF amp fT 0.6GHz  
**Q5** MMBC1321Q5 Mot N - npn VHF amp fT 0.6GHz  
**QQ** 2SC4536 Nec P - npn RF fT 5.7GHz 2W hFE 40-80  
**QR** 2SC4536 Nec P - npn RF fT 5.7GHz 2W hFE 60-120  
**QS** 2SC4536 Nec P - npn RF fT 5.7GHz 2W hFE 100-200

### Codes beginning with 'R'

**Code Device Manufacturer Base Package Leaded Equivalent/Data**

**R** BA895 Sie I SCD80 -  
**R** BA585 Sie I SOD123 pin diode 50mA max  
**R (yellow)** BA597 Sie I SOD323 UHF pin diode 100mA max  
**R (white)** BA595 Sie I SOD323 UHF pin diode 50mA max  
**R1** BFR93 SGS N SOT23 BFR91  
**R1** HSMS-8101 HP K SOT23 10-14GHz schottky mixer  
**R1** UMT4401 Rho N SC70 2N4401  
**R1A** SST3904 Rho N SOT23 2N3904  
**R1A** UMT3904 Rho N SC70 2N3904  
**R1A** MMST3904 Rho N SC59 2N3904  
**R1G** SSTA06 Rho N SOT23 MPSA06  
**R1G** MMSTA06 Rho N SC59 MPSA06  
**R1H** SSTA05 Rho N SOT23 MPSA05  
**R1J** SST6427 Rho N SOT23 -  
**R1K** MMST6428 Rho N SC59 -  
**R1M** SSTA13 Rho N SOT23 MPSA13  
**R1M** MMSTA13 Rho N SC59 MPSA13  
**R1N** SSTA14 Rho N SOT23 MPSA14  
**R1N** MMSTA14 Rho N SC59 MPSA14  
**R1O** MMST5088 Rho N SC59 2N5088  
**R1P** SST2222A Rho N SOT23 2N2222A  
**R1P** UMT2222A Rho N SC70 2N2222A  
**R1P** MMST2222A Rho N SC59 2N2222A  
**R2** BFR93A Phi N SOT23 BFR91A  
**R2** 2SC2351P Nec N SOT23 npn RF fT 4.5 GHz hfe 40-120  
**R2** 2SC4225 Nec N SOT323 npn RF fT 4GHz hfe 40-120  
**R2A** SST3906 Rho N SOT23 2N3906  
**R2A** UMT3906 Rho N SC70 2N3906

**R2A** MMST3906 Rho N SC59 2N3906  
**R2B** MMST2907 Rho N SC59 2N2907  
**R2F** SST2907A Rho N SOT23 2N2907A  
**R2F** UMT2907A Rho N SC70 2N2907A  
**R2F** MMST2907A Rho N SC59 2N2907A  
**R2G** SSTA56 Rho N SOT23 MPSA56  
**R2G** MMSTA56 Rho N SC59 MPSA56  
**R2K** MMST8598 Rho N SC59 -  
**R2O** MMST5087 Rho N SC59 -  
**R2P** MMST5086 Rho N SC59 -  
**R2T** SST4403 Rho N SOT23 2N4403  
**R2T** UMT4403 Rho N SC70 2N4403  
**R2T** MMST4403 Rho N SC59 2N4403  
**R2V** MMSTA64 Rho N SC59 MPSA64  
**R2X** SST4401 Rho N SCOT23 2N4401  
**R2X** MMST4401 Rho N SC59 2N4401  
**R3** 2SC2351Q Nec N SOT23 npn RF fT 4.5 GHz hfe 100-200  
**R3** 2SC4225 Nec N SOT323 npn RF fT 4GHz hfe 100-200  
**R3B** SST918 Rho N SOT23 2N918  
**R3B** MMST918 Rho N SC59 2N918  
**R4** BFR93R Tfk R - BFR91  
**R4** 2SC4092 Nec WQ SOT143 npn RF fT 6GHz hfe 40-120  
**R5** HSMS-8205 HP S SOT143 separate pair HSMS-8101  
**R5** BFR93AR SGS R SOT23R BFR91A  
**R5** 2SC4092 Nec WQ SOT143 npn RF fT 6GHz hfe 100-200  
**R6A** 2SC4187 Nec N SOT323 npn RF fT 4GHz hfe 50-100  
**R6B** 2SC4187 Nec N SOT323 npn RF fT 4GHz hfe 80-160  
**R6C** 2SC4187 Nec N SOT323 npn RF fT 4GHz hfe 125-250  
**R7** HSMS-8207 HP RQ SOT145 HSMS-8101 ring quad mixer  
**R7** BFR106 Phi N SOT23 BFR96S  
**R8** BFG93A Sie TQ SOT143 BFG90  
**R13** 2SC4885 Nec WQ SOT143 npn RF fT 3.5GHz  
**R22** 2SC3356 Nec N SOT23 npn RF fT 7GHz 20V 0.2W  
**R23** 2SC3356Q Nec N SOT23 npn RF fT 7GHz hfe 50-100  
**R23** 2SC4226 Nec N SOT323 npn RF fT 4.5 GHz hfe 40-80  
**R24** 2SC3356R Nec N SOT23 npn RF fT 7GHz hfe 80-160  
**R24** 2SC4226 Nec N SOT323 npn RF fT 4.5 GHz hfe 70-140  
**R25** 2SC3356S Nec N SOT23 npn RF fT 7GHz hfe 125-250  
**R25** 2SC4226 Nec N SOT323 npn RF fT 4.5 GHz hfe 125-250  
**R26** 2SC4093Q Nec WQ SOT143 npn RF fT 6.5 GHz hfe 50-100  
**R26** 2SC5011Q Nec WQ SOT343 npn RF fT 6.5 GHz hfe 50-100  
**R27** 2SC4093R Nec WQ SOT143 npn RF fT 6.5 GHz hfe 80-160  
**R27** 2SC5011R Nec WQ SOT343 npn RF fT 6.5 GHz hfe 80-160  
**R28** 2SC4093S Nec WQ SOT143 npn RF fT 6.5 GHz hfe 125-250  
**R28** 2SC5011S Nec WQ SOT343 npn RF fT 6.5 GHz hfe 125-250  
**R32** 2SC3583 Nec N SOT23 npn RF fT 9GHz @ 20mA  
**R33** 2SC3583Q Nec N SOT23 npn RF fT 9GHz hfe 50-100  
**R33** 2SC4227 Nec N SOT323 npn RF fT 7 GHz hfe 40-90  
**R34** 2SC3583R Nec N SOT23 npn RF fT 9GHz hfe 80-160  
**R34** 2SC4227 Nec N SOT323 npn RF fT 7 GHz hfe 70-150  
**R35** 2SC3583S Nec N SOT23 npn RF fT 9GHz hfe 125-250  
**R35** 2SC4227 Nec N SOT323 npn RF fT 7 GHz hfe 110-240  
**R36** 2SC4094Q Nec WQ SOT143 npn RF fT 9GHz hfe 50-100  
**R36** 2SC5012 Nec WQ SOT343 npn RF fT 9GHz hfe 50-100  
**R37** 2SC4094R Nec WQ SOT143 npn RF fT 9GHz hfe 80-160  
**R37** 2SC5012 Nec WQ SOT343 2SC4094 but min-mold pkg  
**R38** 2SC4094S Nec WQ SOT143 npn RF fT 9GHz hfe 125-250  
**R38** 2SC5012 Nec WQ SOT343 npn RF fT 9GHz hfe 125-250  
**R42** 2SC3585 Nec N SOT23 npn RF fT 10GHz @ 10mA  
**R43** 2SC3585Q Nec N SOT23 npn RF fT 10GHz hfe 50-100  
**R43** 2SC4228 Nec N SOT323 npn RF fT 8.5GHz hfe 50-100  
**R44** 2SC3585R Nec N SOT23 npn RF fT 10GHz hfe 80-160  
**R44** 2SC4228 Nec N SOT323 npn RF fT 8.5GHz hfe 80-160  
**R45** 2SC3585S Nec N SOT23 npn RF fT 10GHz hfe 125-250  
**R45** 2SC4228 Nec N SOT323 npn RF fT 8.5GHz hfe 125-250  
**R46** 2SC4095Q Nec WQ SOT143 npn fT10GHz  
**R46** 2SC5013Q Nec WQ SOT343 npn fT10GHz  
**R47** 2SC4095R Nec WQ SOT143 npn fT10GHz  
**R47** 2SC5013R Nec WQ SOT343 npn fT10GHz  
**R48** 2SC4095S Nec WQ SOT143 npn fT10GHz

**R48** 2SC5013S Nec WQ SOT343 npn fT10GHz  
**R62** 2SC3663 Nec N SOT23 npn RF fT 4GHz @1mA  
**R64** 2SC4091 Nec WQ - npn RF fT 4GHz @1mA  
**R66** 2SC4091Q Nec WQ SOT143 npn RF fT 4GHz hfe 50-100  
**R67** 2SC4091R Nec WQ SOT143 npn RF fT 4GHz hfe 80-160  
**R68** 2SC4091S Nec WQ SOT143 npn RF fT 4GHz hfe 125-250  
**R97** SSTIS97 Rho N SOT23 TIS97  
**RA** BFQ81 Sie N SOT23 BFQ69 npn fT 5.8GHz  
**RAs** BF772 Sie X SOT143 npn RF TV tuners  
**RAT** SSTA28 Rho N SOT23 MPSA28  
**RAT** MMSTA28 Rho N SC59 MPSA28  
**RAV** MMST8908 Rho N SC59 -  
**RBR** SST6838 Rho N SOT23 -  
**RB** MSC1621 Mot H - npn sw 20V 200MHz  
**RBs** BF771 Sie N SOT23 npn RF fT 8GHz  
**RBs** BF771W Sie N SOT323 npn RF fT 8GHz  
**RCs** BFP193 Sie X SOT143 BFQ82 npn fT 8GHz  
**RCs** BFP193W Sie WQ SOT343 BFQ82 npn fT 8GHz  
**RCs** BFR193 Sie N SOT23 BFQ82 npn fT 8GHz  
**RCs** BFR193T Sie N SC75 BFQ82 npn fT 8GHz  
**RDs** BFP180 Sie X SOT143 npn RF 8V 4mA fT 7GHz  
**RDs** BFP180W Sie WQ SOT343 npn RF 8V 4mA fT 7GHz  
**RDs** BFR180 Sie N SOT23 npn RF 8V 4mA fT 7GHz  
**RDs** BFR180W Sie N SOT323 npn RF 8V 4mA fT 7GHz  
**REs** BFS480 Sie DJ SOT363 dual RF npn fT 7GHz  
**REs** BFR280 Sie N SOT23 npn RF 8V 8mA fT 7.5GHz  
**REs** BFR280W Sie N SOT323 npn RF 8V 8mA fT 7.5GHz  
**REs** BFP280 Sie X SOT143 npn RF 8V 8mA fT 7.5GHz  
**REs** BFP280W Sie WQ SOT343 npn RF 8V 8mA fT 7.5GHz  
**RE** 2SC3357 Nec P SOT89 npn RF 1.2W fT 6.5GHz  
**RFs** BFR181 Sie N SOT23 npn RF 12V 20mA fT 8GHz  
**RFs** BFP181 Sie X SOT143 npn RF 12V 20mA fT 8GHz  
**RFs** BFP181W Sie WQ SOT343 npn RF 12V 20mA fT 8GHz  
**RFs** BFS481 Sie DJ SOT363 Dual BFR181  
**RF** 2SC3357 Nec P SOT89 npn RF 1.2W fT 6.5GHz  
**RFQ** SST6839 Rho N SOT23 -  
**RGs** BFR182 Sie N SOT23 npn RF12V 35mA fT 8GHz  
**RGs** BFR182W Sie N SOT323 npn RF12V 35mA fT 8GHz  
**RGs** BFP182 Sie X SOT143 npn RF12V 35mA fT 8GHz  
**RGs** BFP182W Sie WQ SOT343 npn RF12V 35mA fT 8GHz  
**RGs** BFR182T Sie N SC75 npn RF12V 35mA fT 8GHz  
**RGs** BFS482 Sie DJ SOT363 Dual BFR182  
**RHs** BFR183 Sie N SOT23 npn RF 12V 65mA fT 8GHz  
**RHs** BFR183W Sie N SOT323 npn RF 12V 65mA fT 8GHz  
**RHs** BFR183T Sie N SC75 npn RF 12V 65mA fT 8GHz  
**RHs** BFP183 Sie X SOT143 npn RF 12V 65mA fT 8GHz  
**RHs** BFP183W Sie WQ SOT343 npn RF 12V 65mA fT 8GHz  
**RH** 2SC3357 Nec P SOT89 npn RF 1.2W fT 6.5GHz  
**RHs** BFS483 Sie DJ SOT363 Dual BFR183 npn RF  
**RI**s BFP196 Sie X SOT143 pnp RF 12V 100mA Ft 7.5GHz  
**RK**s BFP194 Sie X SOT143 pnp RF 15V 100mA Ft 5GHz  
**RK**s BFR194 Sie N SOT233 pnp RF 15V 100mA Ft 5GHz  
**RKM** RK7002 Rho - SOT23 -  
**RK** 2SC3357 Nec P SOT89 npn RF 1.2W fT 6.5GHz  
**RR** BBY59-02V Inf I SC79 hyperabrupt varicap 7-28pF  
**RR** BFR93P Sie N SOT23 BFR91  
**RVZ** MMST4126 Rho N SC59 2N4126  
**RW** BFR194 Sie N - pnp RF amp 1.5GHz  
**RZC** SST4124 Rho N SOT23 2N4124  
**RZC** MMST4124 Rho N SC59 2N4124

### Codes beginning with 'S'

**Code Device Manufacturer Base Package Leaded Equivalent/Data**

**S (blue)** BA592 Sie I SOD323 BA282  
**S (red)** BB640 Sie I SOD323 70-3pF varicap  
**S (white)** BB535 Sie I SOD323 18-2pF varicap  
**S (yellow)** BB639 Sie I SOD323 39-2.7pF varicap  
**S** BB811 Sie I - 9.8pF @ 1V 30V max  
**S** BAP64-02 Phi I SOD523 3GHz pin diode  
**S0** HSMP-3880 HP C SOT23 pin sw diode  
**S1** HSMP-3881 HP K SOT23 pin sw diode

**S1** BBY31 Phi C SOT23 BB405  
**S1A** S1A Fch I DO214 1N4001  
**S1B** S1B Fch I DO214 1N4002  
**S1D** S1D Fch I DO214 1N4003  
**S1G** S1G Fch I DO214 1N4004  
**S1J** S1J Fch I DO214 1N4005  
**S2** BBY40 Phi C SOT23 BB809  
**S2** BFQ31 Zet N - npn vhf 15V 0.1A  
**S3** BFQ31R Zet R - npn vhf 15V 0.1A  
**S3** BBY51 Sie B SOT23 dual cc varicap  
**S4** BFQ31A Zet N - npn vhf 15V 0.1A  
**S5** BFQ31AR Zet R - npn vhf 15V 0.1A  
**S5** BBY52 Sie B SOT23 dual cc varicap  
**S5** BAT15-099 Sie NQ SOT143 Dual BAT15 schottky  
**S6** BAT15-099R Sie DQ - Ring quad BAT15 schottky  
**S6** BF510 Phi G - BF410A  
**S7** BF511 Phi G - BF410B  
**S7** SST177 Tem F SOT23 J177 p-ch analog sw jfet  
**S7s** BBY53-05 Sie B SOT23 dual cc varicap  
**S7s** BBY53-05W Sie B SOT323 dual cc varicap  
**S7** BAT114-099 Sie NQ SOT143 Dual schottky  
**S8** BF512 Phi G BF410C  
**S8** BAT14-099 Sie NQ SOT143 Dual schottky  
**S9** BAT14-099R Sie DQ - Quad crossover ring schottky  
**S9** BF513 Phi G - BF410D  
**S12** BBY39 Phi B SOT23 2x BBY31  
**S14** SST5114 Sil F SOT23 2N5114  
**S15** SST5115 Sil F SOT23 2N5115  
**S16** SST5116 Sil F SOT23 2N5116  
**S16** ZHCS1006 Zet E SOT23 60V 1A schottky diode  
**S56** ZHCS506 Zet E SOT23 60V 0.5A schottky diode  
**S70** SST270 Sil F SOT23 J270 p-ch jfet  
**S71** SST271 Sil F SOT23 J271 p-ch jfet  
**S74** SST174 Sil F SOT23 J174 p-ch fet  
**S75** SST175 Sil F SOT23 J175 p-ch fet  
**S76** SST176 Sil F SOT23 J176 p-ch fet  
**S76** ZHCS756 Zet E SOT23 60V 0.75A schottky diode  
**S77** SST177 Sil F SOT23 J177 p-ch fet  
**SA** BSS123 Sie M SOT23 n-ch mosfet 100V 0.17A  
**SD** BSS284 Sie M SOT23 p-ch mosfet 50V 0.13A  
**SE** 2SC4703 Nec P - npn RF 1.8W fT 6GHz  
**SF** 2SC4703 Nec P - npn RF 1.8W fT 6GHz  
**SFs** BB804 Sie A SOT23 dual 45-26pF cc VHF varicap  
**sSG** SN7002 Sie M SOT23 n-ch mosfet 60V 0.19A  
**SH** 2SC4703 Nec P - npn RF 1.8W fT 6GHz  
**SH2** BB814 Sie A SOT23 dual 45-20pF cc varicap  
**SM** BB914 Sie B SOT23 dual varicap for FM radio  
**SR** BSS131 Sie M SOT23 n-ch mosfet 240V 0.1A  
**SP** BSS84 Sie M SOT23 p-ch mosfet 50V 0.13A  
**SS** BSS138 Sie M SOT23 n-ch mosfet 50V 0.22A  
**ST** BSS139 Sie M SOT23 n-ch dep mosfet 250V 0.04A

## Codes beginning with 'T'

### Code Device Manufacturer Base Package Leaded Equivalent/Data

**T** BB515 Sie I SOD323 varicap 17.7pf @ 1V 30V max  
**T** BAR67-02W Sie I SCD80 -  
**T0** TP0601T Tem M - p-ch mosfet 60V 0.12A  
**T0** HSMS-2860 HP C SOT23 zero bias schottky diode  
**T0** HSMS-286B HP C SOT323 zero bias schottky diode  
**T1** BCX17 Phi N SOT23 BC327  
**T1p** BCX17 Phi N SOT23 BC327  
**T1t** BCX17 Phi N SOT23 BC327  
**T1** IMT1A Roh DA - 2 x 2SA1037AK pnp  
**T1** BSS63 Mot N SOT23 pnp 100V 0.1A  
**T2** BCX18 Phi N SOT23 BC328  
**T2p** BCX18 Phi N SOT23 BC328  
**T2t** BCX18 Phi N SOT23 BC328  
**T2** IMT2A Roh DB - 2 x 2SA1037AK pnp  
**T2** HSMS-286C HP D SOT323 dual series HSMS-286B  
**T2** HSMS-2862 HP D SOT23 dual series HSMS-286B  
**T3** BSS63 Phi N SOT23 BSS68

**T3** HSMS-286E HP A SOT323 ca dual HSMS-286B  
**T3** HSMS-2863 HP A SOT23 ca dual HSMS-286B  
**T4** BCX17R Phi R SOT23R BC327  
**T4** HSMS-286F HP B SOT323 cc dual HSMS-286B  
**T4** HSMS-2864 HP B SOT23 cc dual HSMS-286B  
**T4** MBD330DW Mot DL SOT363 dual UHF schottky diode  
**T5** HSMS-2865 HP S SOT143 separate dual HSMS-286B  
**T5** BCX18R Phi R SOT23R BC328  
**T6** BSS63R Phi R SOT23R BSS68  
**T7** BSR15 SGS N SOT23 2N2907  
**T7p** BSR15 Phi N SOT23 2N2907  
**T7t** BSR15 Phi N SOT23 2N2907  
**T8** BSR16 SGS N SOT23 2N2907A  
**T8p** BSR16 Phi N SOT23 2N2907A  
**T8t** BSR16 Phi N SOT23 2N2907A  
**T32** 2SC4182 Nec N SOT23 npn RF fT 1.1GHz @3V hfe 60-105  
**T33** 2SC4182 Nec N SOT23 npn RF fT 1.1GHz @3V hfe 85-150  
**T34** 2SC4182 Nec N SOT23 npn RF fT 1.1GHz @3V hfe 120-220  
**T42** 2SC3545P Nec N - npn RF fT 2GHz hfe 50-100  
**T42** 2SC4184 Nec N SOT323 npn RF fT 1.8GHz hfe 40-80  
**T43** 2SC3545Q Nec N - UHF osc/mix fT 2GHz hfe 70-140  
**T43** 2SC4184 Nec N SOT323 npn fT 1.8GHz hfe 60-120  
**T44** 2SC3545R Nec N - npn RF fT 2GHz hfe 120-250  
**T44** 2SC4184 Nec N SOT323 npn RF fT 1.8GHz hfe 100-200  
**T62** 2SC3841P Nec N SOT23 npn RF fT 4GHz hfe 40-80  
**T62** 2SC4186 Nec N SOT323 npn RF fT 4GHz hfe 40-80  
**T63** 2SC3841Q Nec N SOT23 npn RF fT 4GHz hfe 60-120  
**T63** 2SC4186 Nec N SOT323 npn RF fT 4GHz hfe 60-120  
**T64** 2SC3841R Nec N SOT23 npn RF fT 4GHz hfe 100-200  
**T64** 2SC4186 Nec N SOT323 npn RF fT 4GHz hfe 100-200  
**T71** BSR15R SGS R SOT23R 2N2907  
**T72** 2SC4568 Nec N SOT23 npn RF fT 5.5GHz hfe 40-80  
**T72** 2SC4570 Nec N SOT323 npn RF fT 5.5GHz hfe 40-80  
**T73** 2SC4568 Nec N SOT23 npn RF fT 5.5GHz hfe 60-120  
**T73** 2SC4570 Nec N SOT323 npn RF fT 5.5GHz hfe 60-120  
**T74** 2SC4568 Nec N SOT23 npn RF fT 5.5GHz hfe 100-200  
**T74** 2SC4570 Nec N SOT323 npn RF fT 5.5GHz hfe 100-200  
**T75** 2SC4569 Nec N SOT23 npn RF fT 5GHz hfe 40-80  
**T75** 2SC4571 Nec N SOT323 npn RF fT 5GHz hfe 40-80  
**T76** 2SC4569 Nec N SOT23 npn RF fT 5GHz hfe 60-120  
**T76** 2SC4571 Nec N SOT323 npn RF fT 5GHz hfe 60-120  
**T77** 2SC4569 Nec N SOT23 npn RF fT 5GHz hfe 100-200  
**T76** 2SC4571 Nec N SOT323 npn RF fT 5GHz hfe 100-200  
**T78** 2SC5507 Nec WQ SOT343 npn RF fT 25GHz 3V 10mA  
**T79** 2SC5508 Nec WQ SOT343 npn RF fT 25GHz 3V 30mA  
**T80** 2SC5507 Nec WQ SOT343 npn RF fT 17GHz 3V 90mA  
**T81** BSR16R SGS R SOT23R 2N2907A  
**T82** 2SC4954 Nec N SOT23 npn RF fT 12GHz @3V 5mA  
**T82** 2SC4956 Nec WQ SOT143 npn RF fT 12GHz @3V 5mA  
**T82** 2SC4958 Nec N SOT323 npn RF fT 12GHz @3V 5mA  
**T82** 2SC5014 Nec WQ SOT343 npn RF fT 12GHz @3V 5mA  
**T83** 2SC4955 Nec N SOT23 npn RF fT 12GHz @3V 10mA  
**T83** 2SC4957 Nec WQ SOT143 npn RF fT 12GHz @3V 10mA  
**T83** 2SC4959 Nec N SOT323 npn RF fT 12GHz @3V 10mA  
**T83** 2SC5015 Nec WQ SOT343 npn RF fT 12GHz @3V 10mA  
**T84** 2SC5177 Nec N SOT23 npn RF fT 13GHz @2V 7mA  
**T84** 2SC5179 Nec N SOT323 npn RF fT 13GHz @2V 7mA  
**T84** 2SC5178 Nec WQ SOT143 npn RF fT 13GHz @2V 7mA  
**T84** 2SC5180 Nec WQ SOT343 npn RF fT 13GHz @2V 7mA  
**T86** 2SC5182 Nec N SOT23 npn RF fT 12GHz @2V 20mA  
**T86** 2SC5183 Nec WQ SOT143 npn RF fT 12GHz @2V 20mA  
**T86** 2SC5184 Nec N SOT323 npn RF fT 12GHz @2V 20mA  
**T86** 2SC5183 Nec WQ SOT343 npn RF fT 12GHz @2V 20mA  
**T88** 2SC5191 Nec N SOT23 npn RF fT 8.5GHz @3V 20mA  
**T88** 2SC5192 Nec WQ SOT143 npn RF fT 8.5GHz @3V 20mA  
**T88** 2SC5193 Nec N SOT323 npn RF fT 8.5GHz @3V 20mA  
**T88** 2SC5193 Nec WQ SOT343 npn RF fT 8.5GHz @3V 20mA  
**T89** 2SC5288 Nec WQ SOT143 npn RF  
**T90** 2SC5289 Nec WQ SOT143 npn RF  
**T92** BSR18A Fch N SOT23 2N3904

**T92P** BSR18A Phi N SOT23 2N3904  
**T92** 2SA1977 Nec N SOT23 npn RF fT 8.5GHz  
**T93** 2SA1978 Nec N SOT23 npn RF fT 8.5GHz  
**TA** 2SC5431EB Nec N SC59 npn RF fT 4.3GHz 12V 60mA  
**TB** 2SC5431FB Nec N SC59 npn RF fT 4.3GHz 12V 60mA  
**TC** 2SC5432EB Nec N SC59 npn RF fT 4.5GHz 12V 100mA  
**TD** 2SC5432FB Nec N SC59 npn RF fT 4.5GHz 12V 100mA  
**TE** 2SC5433EB Nec N SC59 npn RF fT 7GHz 10V 65mA  
**TF** 2SC5433FB Nec N SC59 npn RF fT 7GHz 10V 65mA  
**TFX** BAL99 Mot V SOT23 switching diode  
**TH** 2SC5434EB Nec N SC59 npn RF fT 8GHz 10V 35mA  
**TJ** 2SC5434FB Nec N SC59 npn RF fT 8GHz 10V 35mA  
**TK** 2SC5435EB Nec N SC59 npn RF fT 12GHz 9V 30mA  
**TL** 2SC5435FB Nec N SC59 npn RF fT 12GHz 9V 30mA  
**TN** 2SC5436EB Nec N SC59 npn RF fT 14GHz 5V 30mA  
**TP** 2SC5436FB Nec N SC59 npn RF fT 14GHz 5V 30mA  
**TS** 2SC5437EB Nec N SC59 npn RF fT 9.5GHz 9V 50mA  
**TT** 2SC5437FB Nec N SC59 npn RF fT 9.5GHz 9V 50mA  
**TV** 2SC5599 Nec N SC-70 npn RF fT 5GHz 5.5V 5mA  
**TV** 2SC5600 Nec N SC-59 npn RF fT 5GHz 5.5V 15mA  
**TV** MMBF112L Mot F SOT23 RF jfet  
**TW** 2SC5602 Nec N SC-70 npn RF fT 13.5GHz 6V 5mA  
**TW** 2SC5603 Nec N SC-59 npn RF fT 13.5GHz 6V 15mA

## Codes beginning with 'U'

**Code Device Manufacturer Base Package Leaded Equivalent/Data**

**U** BB545 Sie I SOD323 20-2pF varicap  
**U1** BCX19 Mot N SOT23 BC337  
**U1p** BCX19 Phi N SOT23 BC337  
**U1t** BCX19 Phi N SOT23 BC337  
**U1** BGX50A Sie BQ SOT143 quad ring Si sw diodes  
**U1A** 3SK230A Nec UQ SOT143 dg RF mosfet  
**U1B** 3SK230B Nec UQ SOT143 dg RF mosfet  
**U1C** 3SK231C Nec UQ SOT143 dg RF mosfet  
**U1D** 3SK231D Nec UQ SOT143 dg RF mosfet  
**U1E** 3SK252E Nec UQ SOT143 dg RF mosfet  
**U1E** 3SK254E Nec UQ SOT343 dg RF mosfet  
**U1G** 3SK253G Nec UQ SOT143 dg RF mosfet  
**U1G** 3SK255G Nec UQ SOT343 dg RF mosfet  
**U2** BCX20 Phi N SOT23 BC338  
**U2t** BCX20 Phi N SOT23 BC338  
**U3** BSS64 Phi N SOT23 120V 0.25A 0.2W  
**U4** BCX19R Phi R SOT23R BC337  
**U5** BCX20R Phi R SOT23R BC338  
**U6** BSS64R Phi R SOT23R 120V 0.25A 0.2W  
**U7** BSR13 SGS N SOT23 2N2222  
**U7p** BSR13 Phi N SOT23 2N2222  
**U7t** BSR13 Phi N SOT23 2N2222  
**U8** BSR14 SGS N SOT23 2N2222A  
**U8p** BSR14 Phi N SOT23 2N2222A  
**U8t** BSR14 Phi N SOT23 2N2222A  
**U16** 2SC4183 Nec N - npn RF 5V fT1GHz hFE 60-120  
**U17** 2SC4183 Nec N - npn RF 5V fT1GHz hFE 90-180  
**U18** 2SC4183 Nec N - npn RF 5V fT1GHz hFE 120-240  
**U21** 2SC4185 Nec N - npn RF 10V fT2.4GHz hFE 40-80  
**U22** 2SC4185 Nec N - npn RF 10V fT2.4GHz hFE 60-120  
**U23** 2SC4185 Nec N - npn RF 10V fT2.4GHz hFE 90-180  
**U55** 3SK134B Nec UQ SOT143 dg mosfet  
**U55** 3SK245 Nec UQ SOT343 dg mosfet  
**U56** 3SK134B Nec UQ SOT143 dg mosfet  
**U56** 3SK245 Nec UQ SOT343 dg mosfet  
**U65** 3SK135A Nec UQ SOT143 dg mosfet  
**U66** 3SK135A Nec UQ SOT143 dg mosfet  
**U71** BSR13R SGS R SOT23R 2N2222  
**U71** 3SK177 Nec UQ SOT143 dg GaAsfet Idss 5-15mA  
**U71** 3SK299 Nec UQ SOT343 dg GaAsfet Idss 5-15mA  
**U72** 3SK177 Nec UQ SOT143 dg GaAsfet Idss10-25mA  
**U72** 3SK299 Nec UQ SOT343 dg GaAsfet Idss 10-25mA  
**U73** 3SK177 Nec UQ SOT143 dg GaAsfet Idss 20-35mA  
**U73** 3SK299 Nec UQ SOT343 dg GaAsfet Idss 20-35mA  
**U74** 3SK177 Nec UQ SOT143 dg GaAsfet Idss 30-40mA

U74 3SK299 Nec UQ SOT343 dg GaAsfet Idss 30-40mA  
U76 3SK206 Nec UQ SOT143 dg GaAsfet Idss 10-25mA  
U77 3SK206 Nec UQ SOT143 dg GaAsfet Idss 20-35mA  
U78 3SK206 Nec UQ SOT143 dg GaAsfet Idss 30-50mA  
U79 3SK206 Nec UQ SOT143 dg GaAsfet Idss 45-80mA  
U81 BSR14R SGS R SOT23R 2N2222A  
U87 3SK176A Nec UQ SOT143 dg mosfet  
U88 3SK176A Nec UQ SOT143 dg mosfet  
U90 3SK223 Nec UQ SOT143 dg mosfet  
U90 3SK243 Nec UQ SOT343 dg mosfet  
U91 3SK223 Nec UQ SOT143 dg mosfet  
U91 3SK243 Nec UQ SOT143 dg mosfet  
U92 BSR17A Fch N SOT23 2N3904  
U92p BSR17A Phi N SOT23 2N3904  
U94 3SK224D Nec UQ SOT143 dg mosfet  
U94 3SK244D Nec UQ SOT343 dg mosfet  
U95 3SK224E Nec UQ SOT143 dg mosfet  
U95 3SK244E Nec UQ SOT143 dg mosfet  
UB 2SB852K Roh N - npn darlington comp 2SD1383K  
UC MSC2404-C Mot H - npn RF 450MHz fT 20V

### Codes beginning with 'V'

#### Code Device Manufacturer Base Package Leaded Equivalent/Data

V01 VN50300T Sil M - n-ch enh mosfet 500V 22mA  
V02 VN0605T Sil M - n-ch enh mosfet 60V/0.18A  
V04 VN45350T Sil M - n-ch enh mosfet 450V 20mA  
V1p BFT25 Phi N SOT23 npn RF 5V 6.5mA 2.3GHz  
V1 MRF959 Mot N SC75 npn RF fT 9GHz  
V2 BFQ67 Tfk N - npn RF fT 7.5 GHz 50mA  
V3 BFG67 Phi X SOT143 npn RF fT 8GHz 50mA  
V5 BFG197 Phi X SOT143 npn RF 7.5GHz 100mA  
V11 3SK131 Nec UQ SOT143 dg VHF mosfet  
V11 3SK242 Nec UQ SOT343 dg VHF mosfet  
V12 3SK131 Nec UQ SOT143 dg VHF mosfet  
V12 3SK242 Nec UQ SOT343 dg VHF mosfet  
V13 3SK131 Nec UQ SOT143 dg VHF mosfet  
V13 ZC932 Zet C SOT23 5 - 17pF hyperabrupt varicap  
V13 3SK242 Nec UQ SOT343 dg VHF mosfet  
V14 ZC931 Zet C SOT23 4 -13.5pF hyperabrupt varicap  
V15 ZC930 Zet C SOT23 3 - 9pF hyperabrupt varicap  
V16 ZC934 Zet C SOT23 25 - 95pF hyperabrupt varicap  
V17 ZC933 Zet C SOT23 12 - 42pF hyperabrupt varicap  
V21 3SK222 Nec UQ SOT143 dg VHF mosfet  
V21 3SK246 Nec UQ SOT343 dg VHF mosfet  
V22 3SK222 Nec UQ SOT143 dg VHF mosfet  
V22 3SK246 Nec UQ SOT343 dg VHF mosfet  
V50 VP0610T Sil M - p-ch enh mosfet -60V 120mA  
VB MSC2295-B Mot H - npn RF 150MHz fT 20V  
VC MSC2295-C Mot H - npn RF 150MHz fT 20V

### Codes beginning with 'W'

#### Code Device Manufacturer Base Package Leaded Equivalent/Data

W0F TSDF1205RW Tfk WQ SOT343 12GHz npn 5mA 4V  
W1s BFT92 Sie N SOT23 BFQ51/BFQ76  
W1s BCR10PN Sie DP SOT363 npn/npn dig 0.1A 10k+10k  
W2 TSDF1220RW Tfk WQ SOT343 12GHz npn 6V 20mA  
W3 BZX84-C2V4 Phi C SOT23 0.3W zener 2.4V±5%  
W4 BZX84-C2V7 Phi C SOT23 0.3W zener 2.7V±5%  
W5 BZX84-C3V0 Phi C SOT23 0.3W zener 3.0V±5%  
W6 BZX84-C3V3 Phi C SOT23 0.3W zener 3.3V±5%  
W7 BZX84-C3V6 Phi C SOT23 0.3W zener 3.6V±5%  
W8 BZX84-C3V9 Phi C SOT23 0.3W zener 3.9V±5%  
W8 BZV49C3V9 Zet O SOT89 1W zener 3.9V±5%  
W9 BZX84-C4V3 Phi C SOT23 0.3W zener 4.3V±5%  
W9 BZV49C4V3 Zet O SOT89 1W zener 4.3V±5%  
W18 BFP181TW Tfk X - npn RF fT 7.8GHz 10V 20mA  
W18 BFP181TRW Tfk WQ - npn RF fT 7.8GHz 10V 20mA  
W22 S822TW Tfk X - npn rf fT 5.2 GHz 6V 8mA  
W22 S822TRW Tfk WQ - npn rf fT 5.2 GHz 6V 8mA  
W28 BFP280TRW Tfk WQ - npn rf fT 7 GHz 8V 10mA  
W28 BFP280TW Tfk X - npn rf fT 7 GHz 8V 10mA

**W52** S852TW Tfk X - npn rf ft 5.2 GHz 6V 8mA  
**W67** BFP67W Tfk X - npn rf ft 7.5 GHz 10V 50mA  
**W82** BFP182TRW Tfk WQ - npn rf ft 7.5 GHz 10V 35mA  
**W82** BFP182TW Tfk X - npn rf ft 7.5 GHz 10V 35mA  
**W83** BFP183TRW Tfk WQ - npn rf ft 7.4 GHz 10V 65mA  
**W83** BFP183T Tfk X - npn rf ft 7.4 GHz 10V 65mA  
**W92** BFP92AW Tfk X SOT343 npn rf ft 6 GHz 15V 30mA  
**WB** 2SD1383K Roh N - npn darlington comp 2SB852K  
**WCs** BCR133 Sie N SOT23 npn dig 50V 0.1A 10k+10k  
**WCs** BCR133T Sie N SC75 npn dig 50V 0.1A 10k+10k  
**WCs** BCR133U Sie N SOT457 npn dig 50V 0.1A 10k+10k  
**WCs** BCR133W Sie N SOT323 npn dig 50V 0.1A 10k+10k  
**WCs** BCR133S Sie DN SOT363 dual BCR133  
**WDs** BCR141 Sie N SOT23 npn 50V 0.1A dig 22k +22k  
**WDs** BCR141T Sie N SC75 npn 50V 0.1A dig 22k +22k  
**WDs** BCR141W Sie N SOT323 npn 50V 0.1A dig 22k +22k  
**WDs** BCR141S Sie DN SOT363 dual BCR141  
**WEs** BCR148 Sie N SOT23 npn 50V 0.1A dig 47k +47k  
**WEs** BCR148T Sie N SC75 npn 50V 0.1A dig 47k +47k  
**WEs** BCR148U Sie N SOT457 npn 50V 0.1A dig 47k +47k  
**WEs** BCR148W Sie N SOT323 npn 50V 0.1A dig 47k +47k  
**WEs** BCR148S Sie DN SOT363 dual BCR148  
**WE1** BFS17W Tfk N - npn rf ft 2.1GHz SOT-323  
**WE2** BFS17AW Tfk N - npn rf ft 3.2GHz SOT-323  
**WFs** BCR08PN Sie DP SOT363 pnp/npn dig 0.1A 2k2+47k  
**WFs** BCR112 Sie N SOT23 npn dig 50V 0.1A 4k7+4k7  
**WF0** TSDF1205W Tfk X SOT343 12 GHz npn 5mA 4V  
**WF2** TSDF1220W Tfk X SOT343 12GHz npn 6V 20mA  
**WFE** BFP93A Tfk X SOT343 BFP93A (FE) in 6GHz npn  
**WGs** BCR116 Sie N SOT23 npn dig 50V 0.1A 4k7+47k  
**WGs** BCR116W Sie N SOT323 npn dig 50V 0.1A 4k7+47k  
**WHs** BCR108 Sie N SOT23 npn dig 50V 0.1A 2k2+47k  
**WHs** BCR108T Sie N SC75 npn dig 50V 0.1A 2k2+47k  
**WHs** BCR108W Sie N SOT323 npn dig 50V 0.1A 2k2+47k  
**WHs** BCR108S Sie DN SOT363 dual BCR108  
**WIs** BCR158 Sie N SOT23 pnp dig 50V 0.1A 2k2+47k  
**WIs** BCR158T Sie N SC75 pnp dig 50V 0.1A 2k2+47k  
**WIs** BCR158W Sie N SOT323 pnp dig 50V 0.1A 2k2+47k  
**WJs** BCR135 Sie N SOT23 npn dig 50V 0.1A 10k+47k  
**WJs** BCR135T Sie N SC75 npn dig 50V 0.1A 10k+47k  
**WJs** BCR135W Sie N SOT323 npn dig 50V 0.1A 10k+47k  
**WJs** BCR135S Sie DN SOT363 dual BCR135  
**WKs** BCR119 Sie N SOT23 npn dig 50V 0.1A 4k7  
**WKs** BCR119S Sie DN SOT363 npn dig 50V 0.1A 4k7  
**WKs** BCR119W Sie N SOT323 npn dig 50V 0.1A 4k7  
**WLs** BCR146 Sie N SOT23 dual npn dig 50V 47k+22k  
**WLs** BCR146W Sie N SOT323 dual npn dig 50V 47k+22k  
**WMs** BCR183 Sie N SOT23 pnp dig 50V 10k+10k  
**WMs** BCR183W Sie N SOT323 pnp dig 50V 10k+10k  
**WMs** BCR183T Sie N SC75 pnp dig 50V 10k+10k  
**WMs** BCR183U Sie N SOT457 pnp dig 50V 10k+10k  
**WMs** BCR183S Sie DO SOT363 dual pnp dig 50V 10k+10k  
**WMO** BF998RW Tfk UQ SOT343R vhf dg mosfet BF988  
**WNs** BCR185 Sie N SOT23 pnp dig 50V 0.1A 10k+47k  
**WNs** BCR185U Sie N SOT457 pnp dig 50V 0.1A 10k+47k  
**WNs** BCR185W Sie N SOT323 pnp dig 50V 0.1A 10k+47k  
**WNs** BCR185S Sie DO SOT363 dual BCR185  
**WOs** BCR191 Sie N SOT23 pnp dig 50V 0.1A 22k+22k  
**WOs** BCR191W Sie N SOT323 pnp dig 50V 0.1A 22k+22k  
**WOs** BCR191S Sie DO SOT363 dual BCR191  
**WO** BZX284-B2V4 Phi I SOD110 0.4W zener 2.4V E24 ±2%  
**WP** BZX284-B2V7 Phi I SOD110 0.4W zener 2.7V E24 ±2%  
**WPs** BCR192 Sie N SOT23 pnp dig 50V 0.1A 22k+47k  
**WPs** BCR192T Sie N SC75 pnp dig 50V 0.1A 22k+47k  
**WPs** BCR192W Sie N SOT323 pnp dig 50V 0.1A 22k+47k  
**WPs** BCR22PN Sie DP SOT363 pnp/npn dig 0.1A 22k+22k  
**WP2** BFR92A Tfk N SOT23 BR90A  
**WQ** BZX284-B3V0 Phi I SOD110 0.4W zener 3.0V E24 ±2%  
**WR** MSD602R Mot N SOT346 npn gp 25V 150mA  
**WRs** BCR198 Sie N SOT23 pnp dig 50V 0.1A 47k+47k

**WRs** BCR198W Sie NN SOT323 pnp dig 50V 0.1A 47k+47k  
**WRs** BCR198S Sie D SOT363 dual BCR198  
**WR** BZX284-B3V3 Phi I SOD110 0.4W zener 3.3V E24 ±2%  
**WR2** BFR93AW Tfk N - BFR91A  
**WRE** BFR280TW Tfk N - npn RF ft 7.5GHz  
**WRF** BFR181TW Tfk N - npn RF ft 7.8GHz  
**WRG** BFR182TW Tfk N - npn RF ft 7GHz  
**WRH** BFR183TW Tfk N - npn RF ft 7.4GHz  
**WS** BCR169 Sie N SOT23 pnp dig 50V 0.1A 4k7  
**WS** BCR169W Sie N SOT323 pnp dig 50V 0.1A 4k7  
**WS** BCR169S Sie DO SOT363 dual BC169  
**WS** BZX284-B3V6 Phi I SOD110 0.4W zener 3.6V E24 ±2%  
**WT** BCR166 Sie N SOT23 pnp dig 50V 0.1A 4k7+47k  
**WT** BCR166W Sie N SOT323 pnp dig 50V 0.1A 4k7+47k  
**WT** BCR48PN Sie DP SOT363 pnp/npn dig npn 2x47k pnp 2k2+47k  
**WT** BZX284-B3V9 Phi I SOD110 0.4W zener 3.9V E24 ±2%  
**WU** BCR162 Sie N SOT23 pnp dig 50V 0.1A 4k7+4k7  
**WU** BCR162T Sie N SC75 pnp dig 50V 0.1A 4k7+4k7  
**WU** BCR35PN Sie DP SOT363 pnp/npn dig 0.1A 10k+47k  
**WU** BZX284-B4V3 Phi I SOD110 0.4W zener 4.3V E24 ±2%  
**WU** MRF2947A Mot DG SOT363 dual MRF941 npn RF 9GHz

## Codes beginning with 'X'

### Code Device Manufacturer Base Package Leaded Equivalent/Data

**X (white)** BB833 Sie I SOT323 9.3-0.75pF varicap  
**X (yellow)** BB835 Sie I SOT323 9.1-0.6pF varicap  
**X1** BFT93 Sie N SOT23 BFQ23 BFQ75  
**X1p** BFT93 Phi N SOT23 BFQ23 BFQ75  
**X1** IMX1 Roh DC - dual 2SC2412K npn  
**X1** BZX84-C27 Phi C SOT23 0.3W zener 27V±5%  
**X2** IMX2 Roh DD - dual 2SC2412K npn  
**X2** BZX99-C13 Phi C SOT23 13V 0.3W zener ±5%  
**X2** BZX84-C30 Zet C SOT23 0.3W zener 30V±5%  
**X2** BZV49C30 Zet O SOT89 1W zener 30V±5%  
**X3** BZX99-C15 Phi C SOT23 15V 0.3W zener ±5%  
**X3** BZX84-C33 Zet C SOT23 0.3W zener 33V±5%  
**X4** BFT93R Sie R SOT23R BFQ23 BFQ75  
**X4** BZX84-C36 Zet C SOT23 0.3W zener 36V±5%  
**X5** BZV49C39 Zet O SOT89 1W zener 39V±5%  
**X5** MMBV409G Mot C SOT23 Hyperabrupt varicap  
**X6** BZV49C43 Zet O SOT89 1W zener 43V±5%  
**X6** BZX84-C43 Zet C SOT23 0.3W zener 43V±5%  
**X7** BZX84-C47 Zet C SOT23 0.3W zener 47V±5%  
**XAs** BCR503 Sie N SOT23 npn dtr 50V 0.5A 2k2 +2k2  
**XA** BZX284-B7V5 Phi I SOD110 0.4W zener 7.5V E24 ±2%  
**XA** BZX99-C4V7 Phi C SOT23 4.7V 0.3W zener  
**XBs** BCR553 Sie N SOT23 pnp dtr 50V 0.5A 2k2 +2k2  
**XB** BZX284-B8V2 Phi I SOD110 0.4W zener 8.2V E24 ±2%  
**XB** BZX99-C5V1 Phi C SOT23 5.1V 0.3W zener  
**XC**s BCR533 Sie N SOT23 npn dtr 50V 0.5A 10k + 10k  
**XC** BZX284-B9V1 Phi I SOD110 0.4W zener 9.1V E24 ±2%  
**XC** BZX99-C5V6 Phi C SOT23 5.6V 0.3W zener  
**XD**s BCR555 Sie N SOT23 pnp dtr 50V 0.5A 2k2 +10k  
**XD** BZX284-B10 Phi I SOD110 0.4W zener 10V E24 ±2%  
**XD** BZX99-C6V2 Phi C SOT23 6.2V 0.3W zener  
**XE** BZX284-B11 Phi I SOD110 0.4W zener 11V E24 ±2%  
**XE** BZX99-C6V8 Phi C SOT23 6.8V 0.3W zener  
**XF**s BCR512 Sie N SOT23 npn dtr 50V 0.5A 4k7+ 4k7  
**XF** BZX284-B12 Phi I SOD110 0.4W zener 12V E24 ±2%  
**XGs** BCR523 Sie N SOT23 npn dtr 50V 0.5A 1k0 +10k  
**XG** BZX284-B13 Phi I SOD110 0.4W zener 13V E24 ±2% S  
**XH**s BCR573 Sie N SOT23 pnp dtr 50V 0.5A 1k0 +10k  
**XH** BZX284-B15 Phi I SOD110 0.4W zener 15V E24 ±2%  
**XH** MMSD701 Mot I SOD123 MMBD701  
**XI** BZX284-B16 Phi I SOD110 0.4W zener 16V E24 ±2%  
**XJ** BZX284-B18 Phi I SOD110 0.4W zener 18V E24 ±2%  
**XK**s BCR519 Sie N SOT23 npn dtr 50V 0.5A R1 4k7  
**XK** BZX284-B20 Phi I SOD110 0.4W zener 20V E24 ±2%  
**XL**s BCR569 Sie N SOT23 pnp dtr 50V 0.5A R1 4k7  
**XL** BZX284-B22 Phi I SOD110 0.4W zener 22V E24 ±2%  
**XL** BZX99-C2V4 Phi C SOT23 2.4V 0.3W zener

**XM**s BCR583 Sie N SOT23 pnp dtr 50V 0.5A 10k +10k  
**XM** BZX284-B24 Phi I SOD110 0.4W zener 24V E24 ±2%  
**XM** BZX99-C2V7 Phi C SOT23 2.7V 0.3W zener  
**XN** BZX284-B27 Phi I SOD110 0.4W zener 27V E24 ±2%  
**XN** BZX99-C3V0 Phi C SOT23 3.0V 0.3W zener  
**XO** BZX284-B30 Phi I SOD110 0.4W zener 30V E24 ±2%  
**XP** MMBD3000 Mot C SOT346 Si diode 30V 0.2A  
**XP** BZX284-B33 Phi I SOD110 0.4W zener 33V E24 ±2%  
**XP** BZX99-C3V3 Phi C SOT23 3.3V 0.3W zener  
**XQ** MMBD3005 Mot A SOT346 dual ca MMBD3000  
**XQ** BZX284-B36 Phi I SOD110 0.4W zener 36V E24 ±2%  
**XQ** 2PD602AQ Phi N SOT346 gp npn hfe 85-170  
**XR** BZX284-B39 Phi I SOD110 0.4W zener 39V E24 ±2%  
**XR** BZX99-C3V6 Phi C SOT23 3.6V 0.3W zener  
**XR** MRF2947RA Mot DH SOT363 dual MRF941 npn RF 9GHz  
**XR** 2PD602AR Phi N SOT346 gp npn hfe 120-240  
**XS** MMBD3010 Mot B SOT346 dual cc MMBD3000  
**XS** BZX284-B43 Phi I SOD110 0.4W zener 43V E24 ±2%  
**XS** BZX99-C3V9 Phi C SOT23 3.9V 0.3W zener  
**XS** 2PD602AS Phi N SOT346 gp npn hfe 170-340  
**XT** BZX284-B47 Phi I SOD110 0.4W zener 47V E24 ±2%  
**XT** MMSD301 Mot I SOD123 MBD301  
**XT** BZX99-C4V3 Phi C SOT23 4.3V 0.3W zener  
**XU** BZX284-B51 Phi I SOD110 0.4W zener 51V E24 ±2%  
**XU** MRF2947RA Mot DH - dual MRF941 npn RF 9GHz  
**XUs** BCR562 Sie N SOT23 pnp dtr 50V 0.5A 4k7+ 4k7  
**XU** BZX99-C7V5 Phi C SOT23 7.5V 0.3W zener  
**XV** BZX284-B56 Phi I SOD110 0.4W zener 56V E24 ±2%  
**XVs** BCR521 Sie N SOT23 npn dtr 50V 0.5A 1k0 +1k0  
**XV** BZX99-C8V2 Phi C SOT23 8.2V 0.3W zener  
**XW** BZX284-B62 Phi I SOD110 0.4W zener 62V E24 ±2%  
**XWs** BCR505 Sie N SOT23 npn dtr 50V 0.5A 2k2 +10k  
**XW** BZX99-C9V1 Phi C SOT23 9.1V 0.3W zener  
**XX** BZX284-B68 Phi I SOD110 0.4W zener 68V E24 ±2%  
**XX** BZX99-C10 Phi C SOT23 10V 0.3W zener  
**XXs** BCR571 Sie N SOT23 pnp dtr 50V 0.5A 1k0 +1k0  
**XY** BZX99-C11 Phi C SOT23 11V 0.3W zener  
**XY** BZX284-B75 Phi I SOD110 0.4W zener 75V E24 ±2%  
**XZ** BZX99-C12 Phi C SOT23 12V 0.3W zener

## Codes beginning with 'Y'

### Code Device Manufacturer Base Package Ledged Equivalent/Data

**Y0s** CGY121B Sie - - GaAs MMIC  
**Y1** BZX84-C11 Phi C SOT23 0.3W zener 11V±5%  
**Y1p** BZX84-C11 Phi C SOT23 0.3W zener 11V±5%  
**Y1** BZV49C11 Zet O SOT89 1W zener 11V ±5%  
**Y2** CLY2 Sie DR MW6 3GHz GaAsfet 0.25W 3GHz  
**Y2** BZX84-C12 Phi C SOT23 0.3W zener 12V±5%  
**Y3** BZX84-C13 Phi C SOT23 0.3W zener 13V±5%  
**Y4** BZX84-C15 Phi C SOT23 0.3W zener 15V±5%  
**Y4** BZV49C15 Zet O SOT89 1W zener 15V ±5%  
**Y5s** CGY59 Sie DS SOT363 GaAs 0.9/1.8GHz preamp  
**Y5** BZX84-C16 Phi C SOT23 0.3W zener 16V±5%  
**Y5** BZV49C16 Zet O SOT89 1W zener 16V ±5%  
**Y6s** CGY62 Sie DS MW6 GaAs MMIC  
**Y6** BZX84-C18 Phi C SOT23 0.3W zener 18V±5%  
**Y7** CGY60 Sie DS MW6 GaAs preamp MMIC 1.8GHz  
**Y7** BZX84-C20 Phi C SOT23 0.3W zener 20V±5%  
**Y8** CGY120 Sie - MW6 GaAs MMIC  
**Y8** BZX84-C22 Phi C SOT23 0.3W zener 22V±5%  
**Y8** BZV49C22 Zet O SOT89 1W zener 22V ±5%  
**Y9s** CGY121A Sie - MW6 GaAs MMIC  
**Y9** BZX84-C24 Phi C SOT23 0.3W zener 24V±5%  
**Y9** BZV49C24 Zet O SOT89 1W zener 24V ±5%  
**Y10** BZX84-C27 Phi C SOT23 0.3W zener 27V±5%  
**Y11** BZX84-C30 Phi C SOT23 0.3W zener 30V±5%  
**Y12** BZX84-C33 Phi C SOT23 0.3W zener 33V±5%  
**Y13** BZX84-C36 Phi C SOT23 0.3W zener 36V±5%  
**Y14** BZX84-C39 Phi C SOT23 0.3W zener 39V±5%  
**Y15** BZX84-C43 Phi C SOT23 0.3W zener 43V±5%  
**Y16** BZX84-C47 Phi C SOT23 0.3W zener 47V±5%

**Y17** BZX84-C51 Phi C SOT23 0.3W zener 51V±5%  
**Y18** BZX84-C56 Phi C SOT23 0.3W zener 56V±5%  
**Y19** BZX84-C62 Phi C SOT23 0.3W zener 62V±5%  
**Y20** BZX84-C68 Phi C SOT23 0.3W zener 68V±5%  
**Y21** BZX84-C75 Phi C SOT23 0.3W zener 75V±5%  
**Y36** BZX84-C13V6 Phi C SOT23 0.3W zener 13.6V±5%  
**Y50** BZX84-A2V4 Phi C SOT23 0.3W zener 2.4V ±1%  
**Y51** BZX84-A2V7 Phi C SOT23 0.3W zener 2.7V ±1%  
**Y52** BZX84-A3V0 Phi C SOT23 0.3W zener 3.0V ±1%  
**Y53** BZX84-A3V3 Phi C SOT23 0.3W zener 3.3V ±1%  
**Y54** BZX84-A3V6 Phi C SOT23 0.3W zener 3.6V ±1%  
**Y55** BZX84-A3V9 Phi C SOT23 0.3W zener 3.9V ±1%  
**Y56** BZX84-A4V3 Phi C SOT23 0.3W zener 4.3V ±1%  
**Y57** BZX84-A4V7 Phi C SOT23 0.3W zener 4.7V ±1%  
**Y58** BZX84-A5V1 Phi C SOT23 0.3W zener 5.1V ±1%  
**Y59** BZX84-A5V6 Phi C SOT23 0.3W zener 5.6V ±1%  
**Y60** BZX84-A6V2 Phi C SOT23 0.3W zener 6.2V ±1%  
**Y61** BZX84-A6V8 Phi C SOT23 0.3W zener 6.8V ±1%  
**Y62** BZX84-A7V5 Phi C SOT23 0.3W zener 7.5V ±1%  
**Y63** BZX84-A8V2 Phi C SOT23 0.3W zener 8.2V ±1%  
**Y64** BZX84-A9V1 Phi C SOT23 0.3W zener 9.1V ±1%  
**Y65** BZX84-A10 Phi C SOT23 0.3W zener 10V ±1%  
**Y66** BZX84-A11 Phi C SOT23 0.3W zener 11V ±1%  
**Y67** BZX84-A12 Phi C SOT23 0.3W zener 12V ±1%  
**Y68** BZX84-A13 Phi C SOT23 0.3W zener 13V ±1%  
**Y69** BZX84-A15 Phi C SOT23 0.3W zener 15V ±1%  
**Y70** BZX84-A16 Phi C SOT23 0.3W zener 16V ±1%  
**Y71** BZX84-A18 Phi C SOT23 0.3W zener 18V ±1%  
**Y72** BZX84-A20 Phi C SOT23 0.3W zener 20V ±1%  
**Y73** BZX84-A22 Phi C SOT23 0.3W zener 22V ±1%  
**Y74** BZX84-A24 Phi C SOT23 0.3W zener 24V ±1%  
**Y75** BZX84-A27 Phi C SOT23 0.3W zener 27V ±1%  
**Y76** BZX84-A30 Phi C SOT23 0.3W zener 30V ±1%  
**Y77** BZX84-A33 Phi C SOT23 0.3W zener 33V ±1%  
**Y78** BZX84-A36 Phi C SOT23 0.3W zener 36V ±1%  
**Y79** BZX84-A39 Phi C SOT23 0.3W zener 39V ±1%  
**Y80** BZX84-A43 Phi C SOT23 0.3W zener 43V ±1%  
**Y81** BZX84-A47 Phi C SOT23 0.3W zener 47V ±1%  
**Y82** BZX84-A51 Phi C SOT23 0.3W zener 51V ±1%  
**Y83** BZX84-A56 Phi C SOT23 0.3W zener 56V ±1%  
**Y84** BZX84-A62 Phi C SOT23 0.3W zener 62V ±1%  
**Y85** BZX84-A68 Phi C SOT23 0.3W zener 68V ±1%  
**Y86** BZX84-A75 Phi C SOT23 0.3W zener 75V ±1%  
**YBs** BSS84 Inf M SOT23 p-ch mosfet 50V 0.13A  
**YO** BZX284-C2V4 Phi I SOD110 0.4W zener 2.4V E12 ±5%  
**YP** BZX284-C2V7 Phi I SOD110 0.4W zener 2.7V E12 ±5%  
**YQ** BZX284-C3V0 Phi I SOD110 0.4W zener 3.0V E12 ±5%  
**YR** MSD601R Mot N SOT346 npn gp 25V  
**YR** BZX284-C3V3 Phi I SOD110 0.4W zener 3.3V E12 ±5%  
**YS** MSD601S Mot N SOT346 npn gp 25V  
**YS** BZX284-C3V6 Phi I SOD110 0.4W zener 3.6V E12 ±5%  
**YT** BZX284-C3V9 Phi I SOD110 0.4W zener 3.9V E12 ±5%  
**YU** BZX284-C4V3 Phi I SOD110 0.4W zener 4.3V E12 ±5%  
**YV** BZX284-C4V7 Phi I SOD110 0.4W zener 4.7V E12 ±5%  
**YW** BZX284-C5V1 Phi I SOD110 0.4W zener 5.1V E12 ±5%  
**YX** BZX284-C5V6 Phi I SOD110 0.4W zener 5.6V E12 ±5%  
**YY** BZX284-C6V2 Phi I SOD110 0.4W zener 6.2V E12 ±5%  
**YZ** BZX284-C6V8 Phi I SOD110 0.4W zener 6.8V E12 ±5%

## Codes beginning with 'Z'

**Code Device Manufacturer Base Package Leaded Equivalent/Data**

**Z0** SST310 Tem F SOT23 J310 n-ch jfet  
**Z0** PDZ2.4B Phi I SOD323 2.4V 0.4W zener  
**Z08** SST308 Sil F SOT23 J308 n-ch jfet  
**Z09** SST309 Sil F SOT23 J309 n-ch jfet  
**Z10** SST310 Sil F SOT23 J310 n-ch jfet  
**Z1** BZX84-C4V7 Phi C SOT23 0.3W zener 4.7V  
**Z1** SSTJ211 Sil F SOT23 J211 n-ch jfet  
**Z1** PDZ2.7B Phi I SOD323 2.7V 0.4W zener  
**Z1** IMZ1A Roh DE - 2SC2414 npn,2SA1037AK pnp  
**Z1** BZV49C4V7 Zet O SOT89 1W ±5% zener 4.7V

Z2 BZX84-C5V1 Phi C SOT23 0.3W zener 4.7V  
Z2 SSTJ212 Sil F SOT23 J212 n-ch jfet  
Z2 IMZ2A Roh DF - 2SC2414 npn,2SA1037AK pnp  
Z2 PDZ3.0B Phi I SOD323 3.0V 0.4W zener  
Z2 BZV49C5V1 Zet O SOT89 1W ±5% zener 5.1V  
Z2U FMMTA63 Zet N SOT23 MPSA63  
Z2V FMMTA64 Zet N SOT23 MPSA64  
Z3 BZX84-C5V6 Phi C SOT23 0.3W zener 5.6V  
Z3 PDZ3.3B Phi I SOD323 3.3V 0.4W zener  
Z3 2SK1078 Tos T SOT89 n-ch mosfet 60V 0.8A  
Z3 BZV49C5V6 Zet O SOT89 1W ±5% zener 5.6V  
Z4 BZX84-C6V2 Phi C SOT23 0.3W zener 6.2V  
Z4 PDZ3.6B Phi I SOD323 3.6V 0.4W zener  
Z4 2SK1079 Tos T SOT89 n-ch mosfet 100V 0.6A  
Z4 BZV49C6V2 Zet O SOT89 1W ±5% zener 6.2V  
Z5 BZX84-C6V8 Phi C SOT23 0.3W zener 6.8V  
Z5 PDZ3.9B Phi I SOD323 3.9V 0.4W zener  
Z5 2SK1717 Tos T SOT89 n-ch mosfet 60V 2A  
Z5 BZV49C6V8 Zet O SOT89 1W ±5% zener 6.8V  
Z6 BZX84-C7V5 Phi C SOT23 0.3W zener 7.5V  
Z6 PDZ4.3B Phi I SOD323 4.3V 0.4W zener  
Z6 2SJ238 Tos T SOT89 p-ch mosfet 60V 1A  
Z6 BZV49C7V5 Zet O SOT89 1W ±5% zener 7.5V  
Z7 BZX84-C8V2 Phi C SOT23 0.3W zener 8.2V  
Z7 PDZ4.7B Phi I SOD323 4.7V 0.4W zener  
Z7 BZV49C8V2 Zet O SOT89 1W ±5% zener 8.2V  
Z8 BZX84-C9V1 Phi C SOT23 0.3W zener 9.1V  
Z8 PDZ5.1B Phi I SOD323 5.1V 0.4W zener  
Z8 BZV49C9V1 Zet O SOT89 1W ±5% zener 9.1V  
Z9 BZX84-C10 Phi C SOT23 0.3W zener 10V  
Z9 PDZ5.6B Phi I SOD323 5.6V 0.4W zener  
Z1 BZV49C10 Zet O SOT89 1W ±5% zener 10V  
Z10 SST310 Sil F SOT23 J310 n-ch jfet  
Z11 BZX84-C2V4 Phi C SOT23 0.3W zener 2.4V ±5%  
Z12 BZX84-C2V7 Phi C SOT23 0.3W zener 2.7V ±5%  
Z13 BZX84-C3V0 Phi C SOT23 0.3W zener 3.0V ±5%  
Z14 BZX84-C3V3 Phi C SOT23 0.3W zener 3.3V ±5%  
Z15 BZX84-C3V6 Phi C SOT23 0.3W zener 3.6V ±5%  
Z16 BZX84-C3V9 Phi C SOT23 0.3W zener 3.9V ±5%  
Z17 BZX84-C4V3 Phi C SOT23 0.3W zener 4.3V ±5%  
Z21 DTC113ZE Rho N EMT3 npn dtr 1k0 + 10k 50V 100mA  
Z21 DTC113ZUA Rho N SC70 npn dtr 1k0 + 10k 50V 100mA  
Z21 DTC113ZKA Rho N SC59 npn dtr 1k0 + 10k 50V 100mA  
Z50 BZX84-B2V4 Phi C SOT23 0.3W zener 2.4V ±2%  
Z51 BZX84-B2V7 Phi C SOT23 0.3W zener 2.7V ±2%  
Z52 BZX84-B3V0 Phi C SOT23 0.3W zener 3.0V ±2%  
Z53 BZX84-B3V3 Phi C SOT23 0.3W zener 3.3V ±2%  
Z54 BZX84-B3V6 Phi C SOT23 0.3W zener 3.6V ±2%  
Z55 BZX84-B3V9 Phi C SOT23 0.3W zener 3.9V ±2%  
Z56 BZX84-B4V3 Phi C SOT23 0.3W zener 4.3V ±2%  
Z57 BZX84-B4V7 Phi C SOT23 0.3W zener 4.7V ±2%  
Z58 BZX84-B5V1 Phi C SOT23 0.3W zener 5.1V ±2%  
Z59 BZX84-B5V6 Phi C SOT23 0.3W zener 5.6V ±2%  
Z60 BZX84-B6V2 Phi C SOT23 0.3W zener 6.2V ±2%  
Z61 BZX84-B6V8 Phi C SOT23 0.3W zener 6.8V ±2%  
Z62 BZX84-B7V5 Phi C SOT23 0.3W zener 7.5V ±2%  
Z63 BZX84-B8V2 Phi C SOT23 0.3W zener 8.2V ±2%  
Z64 BZX84-B9V1 Phi C SOT23 0.3W zener 9.1V ±2%  
Z65 BZX84-B10 Phi C SOT23 0.3W zener 10V ±2%  
Z66 BZX84-B11 Phi C SOT23 0.3W zener 11V ±2%  
Z67 BZX84-B12 Phi C SOT23 0.3W zener 12V ±2%  
Z68 BZX84-B13 Phi C SOT23 0.3W zener 13V ±2%  
Z69 BZX84-B15 Phi C SOT23 0.3W zener 15V ±2%  
Z70 BZX84-B16 Phi C SOT23 0.3W zener 16V ±2%  
Z71 BZX84-B18 Phi C SOT23 0.3W zener 18V ±2%  
Z72 BZX84-B20 Phi C SOT23 0.3W zener 20V ±2%  
Z73 BZX84-B22 Phi C SOT23 0.3W zener 22V ±2%  
Z74 BZX84-B24 Phi C SOT23 0.3W zener 24V ±2%  
Z75 BZX84-B27 Phi C SOT23 0.3W zener 27V ±2%  
Z76 BZX84-B30 Phi C SOT23 0.3W zener 30V ±2%

Z77 BZX84-B33 Phi C SOT23 0.3W zener 33V ±2%  
Z78 BZX84-B36 Phi C SOT23 0.3W zener 36V ±2%  
Z79 BZX84-B39 Phi C SOT23 0.3W zener 39V ±2%  
Z80 BZX84-B43 Phi C SOT23 0.3W zener 43V ±2%  
Z81 BZX84-B47 Phi C SOT23 0.3W zener 47V ±2%  
Z82 BZX84-B51 Phi C SOT23 0.3W zener 51V ±2%  
Z83 BZX84-B56 Phi C SOT23 0.3W zener 56V ±2%  
Z84 BZX84-B62 Phi C SOT23 0.3W zener 62V ±2%  
Z85 BZX84-B68 Phi C SOT23 0.3W zener 68V ±2%  
Z86 BZX84-B75 Phi C SOT23 0.3W zener 75V ±2%  
ZA BZX284-C7V5 Phi I SOD110 0.4W zener 7.5V ±5%  
ZA PDZ6.2B Phi I SOD323 6.2V 0.4W zener  
ZB FMMT4123 Zet N SOT23 2N4123  
ZB PDZ6.8B Phi I SOD323 6.8V 0.4W zener  
ZB BZX284-C8V2 Phi I SOD110 0.4W zener 8.2V ±5%  
ZC FMMT4124 Zet N SOT23 2N4124  
ZC BZX284-C9V1 Phi I SOD110 0.4W zener 9.1V ±5%  
ZC PDZ7.5B Phi I SOD323 7.5V 0.4W zener  
ZD FMMT4125 Zet N SOT23 2N4125  
ZD MMBT4125 Mot N SOT23 2N4125  
ZD BZX284-C10 Phi I SOD110 0.4W zener 10V ±5%  
ZD PDZ8.2B Phi I SOD323 8.2V 0.4W zener  
ZE FMMT4126 Zet N SOT23 2N4126  
ZE MMBT4123 Nat N SOT23 2N4123  
ZE BZX284-C11 Phi I SOD110 0.4W zener 11V ±5%  
ZE PDZ9.1B Phi I SOD323 9.1V 0.4W zener  
ZF BZX284-C12 Phi I SOD110 0.4W zener 12V ±5%  
ZF PDZ10B Phi I SOD323 10V 0.4W zener  
ZG BZX284-C13 Phi I SOD110 0.4W zener 13V ±5%  
ZG PDZ11B Phi I SOD323 11V 0.4W zener  
ZH BZX284-C15 Phi I SOD110 0.4W zener 15V ±5%  
ZH PDZ12B Phi I SOD323 12V 0.4W zener  
ZHK SM2Z5V1 STM I 2W SMD 5.1V 2W zener  
ZHL SM2Z5V6 STM I 2W SMD 5.6V 2W zener  
ZHW SM2Z12 STM I 2W SMD 12V 2W zener  
ZI BZX284-C16 Phi I SOD110 0.4W zener 16V ±5%  
ZJ BZX284-C18 Phi I SOD110 0.4W zener 18V ±5%  
ZJ PDZ13B Phi I SOD323 13V 0.4W zener  
ZJF SM2Z18 STM I 2W SMD 18V 2W zener  
ZJQ SM2Z30 STM I 2W SMD 30V 2W zener  
ZK BZX284-C20 Phi I SOD110 0.4W zener 20V ±5%  
ZK PDZ15B Phi I SOD323 15V 0.4W zener  
ZKR SM2Z150 STM I 2W SMD 150V 2W zener  
ZL BZX284-C22 Phi I SOD110 0.4W zener 22V ±5%  
ZL PDZ16B Phi I SOD323 16V 0.4W zener  
ZM BZX284-C24 Phi I SOD110 0.4W zener 24V ±5%  
ZM PDZ18B Phi I SOD323 18V 0.4W zener  
ZN BZX284-C27 Phi I SOD110 0.4W zener 27V ±5%  
ZN PDZ20B Phi I SOD323 20V 0.4W zener  
ZO BZX284-C30 Phi I SOD110 0.4W zener 30V ±5%  
ZP BZX284-C33 Phi I SOD100 0.4W zener 33V ±5%  
ZP PDZ22B Phi I SOD323 22V 0.4W zener  
ZQ BZX284-C36 Phi I SOD110 0.4W zener 36V ±5%  
ZQ PDZ24B Phi I SOD323 24V 0.4W zener  
Z-Q 2PC4081Q Phi N SOT323 gp npn hfe 120-270  
ZtQ 2PC4081Q Phi N SOT323 gp npn hfe 120-270  
ZR MSD1819A Mot N SOT323 npn gp 50V  
ZR BZX284-C39 Phi I SOD110 0.4W zener 39V ±5%  
ZR PDZ27B Phi I SOD323 27V 0.4W zener  
Z-R 2PC4081R Phi N SOT323 gp npn hfe 180-390  
ZtR 2PC4081R Phi N SOT323 gp npn hfe 180-390  
ZS BZX284-C43 Phi I SOD110 0.4W zener 43V ±5%  
ZS PDZ30B Phi I SOD323 30V 0.4W zener  
ZS1 ZHCS1000 Zet E SOT23 30V 1A schottky diode  
ZS5 ZHCS500 Zet E SOT23 40V 0.5A schottky diode  
ZS7 ZHCS750 Zet E SOT23 30V 0.75A schottky diode  
Z-S 2PC4081S Phi N SOT323 gp npn hfe 270-560  
ZtS 2PC4081S Phi N SOT323 gp npn hfe 270-560  
ZT BZX284-C47 Phi I SOD110 0.4W zener 47V ±5%  
ZT PDZ33B Phi I SOD323 33V 0.4W zener

**ZU** BZX284-C51 Phi I SOD110 0.4W zener 51V ±5%  
**ZU** PDZ36B Phi I SOD323 36V 0.4W zener  
**ZV** BZX284-C56 Phi I SOD110 0.4W zener 56V ±5%  
**ZW** BZX284-C62 Phi I SOD110 0.4W zener 62V ±5%  
**ZX** BZX284-C68 Phi I SOD110 0.4W zener 68V ±5%  
**ZY** BZX284-C75 Phi I SOD110 0.4W zener 75V ±5%  
**ZS1** ZHCS1000 Zet C SOT23 schottky 1A 30V  
**ZS7** ZHCS750 Zet C SOT23 schottky 0.75A 30V  
**BASE PACKAGES**

## PACKAGE EQUIVALENTS

Here is a table of more-or-less equivalents for many SMD packages.

### Package Equivalent

SOT89 SC62  
SOT223 SC73  
SOT323 SC70  
SOT346 SC59  
SOT363 SC88  
SOT416 SC75 SC90  
SOT457 SC74  
SOD323 SC76

## SMD Ceramic Capacitor Coding

SMD ceramic capacitors are sometimes marked with a code, consisting of one or two letters and a digit. The first letter if present is a manufacturer code (i.e K for Kemet, etc.), the second letter the mantissa and the digit the exponent (multiplier) of the capacitance in pF. For example **S3** is a 4.7nF ( $4.7 \times 10^3$  pf) capacitor from an unknown manufacturer, while **KA2** is a 100 pF ( $1.0 \times 10^2$  pF) capacitor from Kemet. *Thanks to K7ITM for providing this information!*

Letter Mantissa Letter Mantissa Letter Mantissa Letter Mantissa

A 1.0 J 2.2 S 4.7 a 2.5  
B 1.1 K 2.4 T 5.1 b 3.5  
C 1.2 L 2.7 U 5.6 d 4.0  
D 1.3 M 3.0 V 6.2 e 4.5  
E 1.5 N 3.3 W 6.8 f 5.0  
F 1.6 P 3.6 X 7.5 m 6.0  
G 1.8 Q 3.9 Y 8.2 n 7.0  
H 2.0 R 4.3 Z 9.1 t 8.0  
y 9.0

## SMD Electrolytic Capacitor Coding

SMD electrolytic capacitors are often marked with their capacitance and working voltage, e.g. **10 6V** is 10  $\mu$ F 6V. Sometimes a code is used instead, which normally consists of a letter and 3 digits. The letter indicates the working voltage and the 3 digits (2 digits and multiplier) give the capacitance in pF.

The band or stripe indicates the positive terminal.

For example, a capacitor marked **A475** is a 4.7 $\mu$  F 10V unit.

475 = 47 x 10<sup>5</sup> pF = 4.7 x 10<sup>6</sup> pF = 4.7 $\mu$  F

### **SMD Resistor Coding**

SMD Resistors are usually coded with a numerical equivalent of the familiar three band colour code. In the same way as wire ended components, precision resistors (1% or better) may be marked with a four digit code.

The first two (or 3) digits are the first two (or 3) digits of the resistance in ohms, and the third(or 4th) is the number of zeros to follow - the 'multiplier'.

Resistances of less than 10 ohms have a 'R' to indicate the position of the decimal point.

Some examples will make this clearer:

### **SOD-123 Package Diodes**

Letter Voltage

e 2.5

G 4

J 6.3

A 10

C 16

D 20

E 25

V 35

H 50

### **Three Digit Examples Four Digit Examples**

**330** is 33 ohms - *not 330 ohms* **1000** is 100 ohms - *not 1000 ohms*

**221** is 220 ohms **4992** is 49900 ohms, or 49.9 kohm

**683** is 68000 ohms, or 68 kohm **16234** is 162000 ohms, or 162 kohm

**105** is 1000000 ohms, or 1 Mohm

**8R2** is 8.2 ohms **0R56** or **R56** is 0.56 ohms

Colour-coded SOD-123 diodes. Devices marked with letter/number codes will be found in the main list.

### **CATHODE**

#### **BAND**

#### **Devices**

Red BA620, BB620

Yellow BA619, BB619

Green BA585

Blue BA582, 583, 584

White BA512, 515, BB515, 811

### **HP diode coding**

HP diodes appear to follow a regular coding scheme. Although this is not always followed, it may help in identifying diodes and package styles if used with caution.

Not all HP diodes follow this scheme, so beware!

The general type number scheme is: **HSMX-123#**

**HSM** stands for HP Surface Mount, I suppose!

**X** is either **S** for a schottky diode or **P** for a PIN diode.

**#** is a letter for a SOT323 package and a number for a SOT23 device.

It denotes the internal arrangement - single, common anode pair, quad, etc. The

digit of the code marked on the package itself usually corresponds to the package style (#) number. The numbers and letters correspond to the following arrangements:

**Device style**

#

**SOT-23**

#

**SOT-323**

**Printed on**

**package**

**Codebook**

**base**

Single diode - standard 0 B 0 C

Single diode – reverse 1 A 1 K

Dual series - standard 2 C 2 D

Dual series – reverse 2 C 2 Z

Common anode pair 3 3 A

Common cathode pair 4 4 B

Unconnected pair 5 5 S

Ring Quad 7 7 RQ

Bridge Quad 8 8 BQ

Dual Anode A Y

Dual Cathode B J

**SOD-80 Package Diodes**

The SOD-80 package, also known as a MELF, is a small glass cylinder with metal ends.

Code marked devices

Marked 2Y4 to 75Y (E24 series) BZV49 series 1W zener diodes (2.4 - 75V)

Marked C2V4 TO C75 (E24 series) BZV55 series 500mW zener diodes (2.4 - 75V)

The cathode end is indicated by a coloured band.

Coloured band marked devices

**CATHODE**

**BAND(S)**

**Device**

Black

BAS32, BAS45, BAV105 LL4148, 50,

51,53, LL4448 BB241, BB249

Black Brown LL4148, LL914

Black Orange LL4150, BB219

Brown Green LL300

Brown Black LL4448

Red BA682

Red Orange BA683

Red Green BA423L

Red White LL600

Orange Yellow LL3595

Yellow BZV55,BZV80,BZV81 series zeners

Green BAV105, BB240

Green Black BAV100

Green Brown BAV101

Green Red BAV102

Green Orange BAV103

Grey BAS81, 82, 83, 85, 86

White BB219

White Green BB215