

SOD- 123 SMD



Zener Diodes

BZT52-C2V7
thru
BZT52-C51

Use Advantages

These Pro Electron zener diodes use lower zener test currents popular in so many of today's battery powered applications.

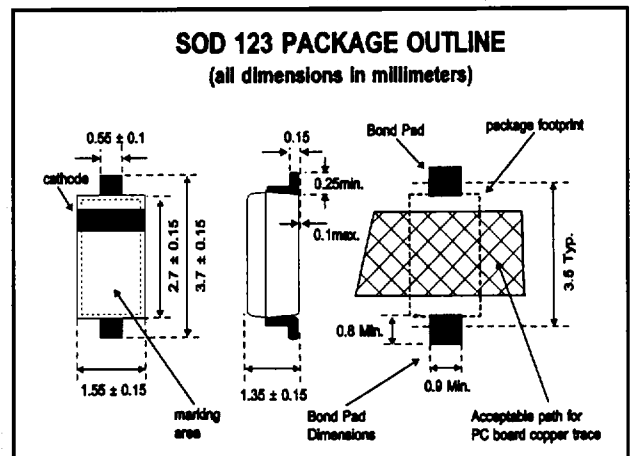
For use in clipping and stabilizing circuits, where local protection is needed.

Replaces SMA, MELF or SOD-80 packages on boards without redesign.

Compatible with all major automatic assembly equipment.

Features

- Small size
- High quality
- Thermally matched system
- Few applications restrictions
- Thermo-compression bonding
- DO-35 axial leaded types available
- Also comes in a glass Mini Melf SMD



Absolute Maximum Ratings	Symbol	Value	Unit
Power Dissipation at $T_{Amb} = 25^{\circ}C$	P_{tot}	410 ¹⁾	Milliwatts
Junction Temperature	T_j	150	$^{\circ}C$
Storage Temperature Range	T_s	-65 to +150	$^{\circ}C$

Characteristics at $T_{Amb} = 25^{\circ}C$	Symbol	Max. Limit	Unit
Thermal Resistance Junction to Ambient Air	R_{thA}	300 ¹⁾	$^{\circ}C/W$

1) Mounted on Ceramic Substrate 0.7 mm, 2.5 cm² area

DETAILED SPECIFICATIONS ON REVERSE

SOD-123 SMD
BZT52-C2V7
 thru
BZT52-C51



Zener Diodes
Detail
Specifications

Type	Zener ²⁾ Voltage Range (V _Z) @ I _{Z1} Volts mA		Maximum Zener Impedance		Maximum Reverse Leakage Current		Typical Temp.Coeff. of Zener Voltage %/°C	Admissible Zener Current ¹⁾ @T _{AMB}	
			Zzt @ I _{Z1}	Zzk @ 1.0mA	I _R	@ V _R		45°C	25°C
			Ohms	Ohms	µA	Volts		I _Z =mA	I _Z =mA
BZT52-C2V7	2.5...2.9	5.0	83	500	-	-	0.075	113	134
BZT52-C3	2.8 3.2	5.0	95	500	-	-	-0.07	98	118
BZT52-C3V3	3.1...3.5	5.0	95	500	-	-	-0.06	92	109
BZT52-C3V6	3.4...3.8	5.0	95	500	-	-	-0.055	85	100
BZT52-C3V9	3.7...4.1	5.0	95	500	-	-	-0.045	77	92
BZT52-C4V3	4.0...4.6	5.0	95	500	-	-	-0.01	71	84
BZT52-C4V7	4.4...5.0	5.0	78	500	-	-	+0.01	64	76
BZT52-C5V1	4.8...5.4	5.0	60	480	0.1	0.8	+0.025	56	67
BZZ52-C5V6	5.2...6.0	5.0	40	400	0.1	1.0	+0.035	50	59
BZT52-C6V2	5.8...6.6	5.0	10	200	0.1	2.0	+0.04	45	54
BZT52-C6V8	6.4...7.2	5.0	8.0	150	0.1	3.0	+0.044	41	49
BZT52-C7V5	7.0...7.9	5.0	7.0	50	0.1	5.0	+0.051	37	44
BZT52-C8V2	7.7...8.7	5.0	7.0	50	0.1	6.0	+0.055	34	40
BZT52-C9V1	8.5...9.6	5.0	10	50	0.1	7.0	+0.061	30	36
BZT52-C10	9.4...10.6	5.0	15	70	0.1	7.5	+0.065	28	33
BZT52-C11	10.4...11.6	5.0	20	70	0.1	8.5	+0.068	25	30
BZT52-C12	11.4...12.7	5.0	20	90	0.1	9.0	+0.07	23	28
BZT52-C13	12.4...14.1	5.0	25	110	0.1	10	+0.075	21	25
BZT52-C15	13.8...15.8	5.0	30	110	0.1	11	+0.079	19	23
BZT52-C16	15.3...17.1	5.0	40	170	0.1	12	+0.080	17	20
BZT52-C18	16.8...19.1	5.0	50	170	0.1	14	+0.083	15	18
BZT52-C20	18.8...21.2	5.0	50	220	0.1	15	+0.085	14	17
BZT52-C22	20.8...23.3	5.0	55	220	0.1	17	+0.087	13	16
BZT52-C24	22.8...25.6	5.0	80	220	0.1	18	+0.090	11	13
BZT52-C27	25.1...28.9	5.0	80	250	0.1	20	+0.091	10	12
BZT52-C30	28...32	5.0	80	250	0.1	22.5	+0.093	9	10
BZT52-C33	31...35	5.0	80	250	0.1	25	+0.094	8	9
BZT52-C36	34...38	5.0	90	250	0.1	27	+0.094	8	9
BZT52-C39	37...41	5.0	90	300	0.1	29	+0.095	7	8
BZT52-C43	40...46	5.0	100	700	0.1	32	+0.095	6	7
BZT52-C47	44...50	5.0	100	750	0.1	35	+0.096	5	6
BZT52-C51	48...54	5.0	100	750	0.1	38	+0.096	5	6

1) Mounted on Ceramic Substrate 0.7 mm, 2.5 cm² area. 2) Tested with pulses I_{ZTP} = 5 ms.

DO-35 axial leaded and MELF SMD Glass packages available.

BKC
 BKC Semiconductors
 Incorporated

6 Lake Street
 Lawrence, MA
 USA 01841

Telephone (508) 681-0392 • FAX (508) 681-9135