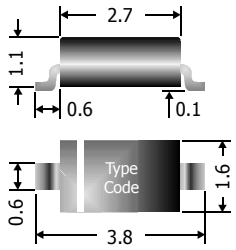
BZT52C2V4 ... BZT52C75 (500 mW)

Surface mount Silicon Planar Zener Diodes
Silizium-Planar-Zener-Dioden für die Oberflächenmontage

Version 2010-09-09



Dimensions - Maße [mm]

Maximum power dissipation Maximale Verlustleistung	500 mW
Nominal Z-voltage Nominale Z-Spannung	3...75 V
Plastic case Kunststoffgehäuse	SOD-123
Weight approx. Gewicht ca.	0.01 g
Standard packaging taped and reeled Standard Lieferform gegurtet auf Rolle	

Standard Zener voltage tolerance is graded to the international E 24 (~ ±5%) standard.
Other voltage tolerances and higher Zener voltages on request.

Die Toleranz der Zener-Spannung ist in der Standard-Ausführung gestuft nach der internationalen Reihe E 24 (~ ±5%). Andere Toleranzen oder höhere Arbeitsspannungen auf Anfrage.

Maximum ratings and Characteristics **Grenz- und Kennwerte**

		BZT52-series	
Power dissipation – Verlustleistung	T_A = 25°C	P_{tot}	500 mW [1])
Operating junction temperature – Sperrschichttemperatur Storage temperature – Lagerungstemperatur		T_j T_S	-50...+150°C -50...+150°C
Thermal resistance junction to ambient air Wärmewiderstand Sperrschicht – umgebende Luft		R_{thA}	< 300 K/W [1])
Thermal resistance junction to terminal Wärmewiderstand Sperrschicht – Anschluss		R_{thT}	< 240 K/W
Zener voltages see table on next page – Zener-Spannungen siehe Tabelle auf der nächsten Seite			

Marking – Stempelung (alternative)			
BZT52C2V4 = MH, WX, 4C	BZT52C6V2 = NA, WA, 4R	BZT52C16 = NN, WK, 5H	BZT52C43 = WU, 6A
BZT52C2V7 = MJ, W1, 4D	BZT52C6V8 = NB, WB, 4X	BZT52C18 = NP, WL, 5J	BZT52C47 = WV, 6B
BZT52C3V0 = MK, W2, 4E	BZT52C7V5 = NC, WC, 4Y	BZT52C20 = NR, WM, 5K	BZT52C51 = WW, 6C
BZT52C3V3 = MM, W3, 4F	BZT52C8V2 = ND, WD, 4Z	BZT52C22 = NX, WN, 5M	BZT52C56 = 6D
BZT52C3V6 = MN, W4, 4H	BZT52C9V1 = NE, WE, 5A	BZT52C24 = NY, WO, 5N	BZT52C62 = 6E
BZT52C3V9 = MP, W5, 4J	BZT52C10 = NE, WF, 5B	BZT52C27 = NZ, WP, 5P	BZT52C68 = 6F
BZT52C4V3 = MR, W6, 4K	BZT52C11 = NH, WG, 5C	BZT52C30 = PA, WQ, 5R	BZT52C75 = 6H
BZT52C4V7 = MX, W7, 4M	BZT52C12 = NJ, WH, 5D	BZT52C33 = PB, WR, 5X	
BZT52C5V1 = MY, W8, 4N	BZT52C13 = NK, WI, 5E	BZT52C36 = PC, WS, 5Y	
BZT52C5V6 = MZ, W9, 4P	BZT52C15 = NM, WJ, 5F	BZT52C39 = PD, WT, 5Z	

1 Mounted on P.C. board with 25 mm² copper pads at each terminal
Montage auf Leiterplatte mit 25 mm² Kupferbelag (Lötpad an jedem Anschluss)

Maximum ratings — Grenzwerte

Type Typ	Z-voltage range [1]) Z-Spanngs.-Bereich [1]) I_{ZT} = 5mA		Dynamic resistance Diff. Widerstand		Temp. Coeffic. of Z-voltage ...der Z-Spannung	Reverse volt. Sperrspanng. I_R = 100 nA	Z-current [2]) Z-Strom [2]) T_A = 25°C
	$V_{Z\,min}$ [V]	$V_{Z\,max}$ [V]	Z_{ZK} [Ω]	I_{ZK} [mA]	α_{VZ} [10^{-4} /°C]	V_R [V]	I_{Zmax} [mA]
BZT52C2V4	2.2	2.6	< 100	5	-9...-6	1 (<120 µA)	192
BZT52C2V7	2.5	2.9	< 110	5	-9...-6	1 (<120 µA)	172
BZT52C3V0	2.8	3.2	< 120	5	-8...-5	1 (<50 µA)	156
BZT52C3V3	3.1	3.5	< 130	5	-8...-5	1 (<20 µA)	143
BZT52C3V6	3.4	3.8	< 130	5	-8...-5	1 (<10 µA)	132
BZT52C3V9	3.6	4.2	< 130	5	-8...-5	1 (<5 µA)	119
BZT52C4V3	4.0	4.6	< 130	5	-6...-3	1 (<5 µA)	109
BZT52C4V7	4.4	5.0	< 130	5	-5...+2	1 (<2 µA)	100
BZT52C5V1	4.8	5.4	< 130	5	-2...+2	1.5 (<2 µA)	93
BZT52C5V6	5.2	6.0	< 80	5	-5...+5	2.5 (<1 µA)	83
BZT52C6V2	5.8	6.6	< 50	5	-3...+6	3 (<1 µA)	76
BZT52C6V8	6.4	7.2	< 30	5	+3...+7	3.5 (<0.5 µA)	69
BZT52C7V5	7.0	7.9	< 30	5	+3...+7	4 (<0.5 µA)	63
BZT52C8V2	7.7	8.7	< 30	5	+8...+7	5 (<0.5 µA)	57
BZT52C9V1	8.5	9.6	< 30	5	+3...+9	6 (<0.5 µA)	0
BZT52C10	9.4	10.6	< 30	5	+3...+10	7	0
BZT52C11	10.4	11.6	< 30	5	+3...+11	8	0
BZT52C12	11.4	12.7	< 35	5	+3...+11	9	0
BZT52C13	12.4	14.1	< 35	5	+3...+11	10	0
BZT52C15	13.8	15.6	< 40	5	+3...+11	11	0
BZT52C16	15.3	17.1	< 40	5	+3...+11	12	0
BZT52C18	16.8	19.1	< 45	5	+3...+11	13	0
BZT52C20	18.8	21.2	< 50	5	+3...+11	15	0
BZT52C22	20.8	23.3	< 55	5	+4...+12	17	0
BZT52C24	22.8	25.6	< 60	5	+4...+12	19	0
BZT52C27	25.1	28.9	< 70	2	+4...+12	21	0
BZT52C30	28	32	< 80	2	+4...+12	23	16
BZT52C33	31	35	< 80	2	+4...+12	25	14
BZT52C36	34	38	< 90	2	+4...+12	27	13
	I_{ZT} = 2.5 mA						
BZT52C39	37	41	<100	2	+4...+12	30 (< 2 µA)	12
BZT52C43	40	46	<130	2	+4...+12	33 (< 2 µA)	11
BZT52C47	44	50	<150	2	+4...+12	36 (< 2 µA)	10
BZT52C51	48	54	<180	2	+4...+12	39 (< 1 µA)	9
BZT52C56	52	60	<180	2	+4...+12	43 (< 1 µA)	8
BZT52C62	58	66	<200	2	+4...+12	47 (<0.2 µA)	8
BZT52C68	64	72	<250	2	+4...+12	52 (<0.2 µA)	7
BZT52C75	70	79	<300	2	+4...+12	57 (<0.2 µA)	6

1 Tested with pulses (20 ms) – Gemessen mit Impulsen (20 ms)
2 Mounted on P.C. board with 25 mm² copper pads at each terminal
Montage auf Leiterplatte mit 25 mm² Kupferbelag (Lötpad an jedem Anschluss)

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