

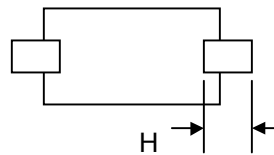
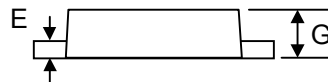
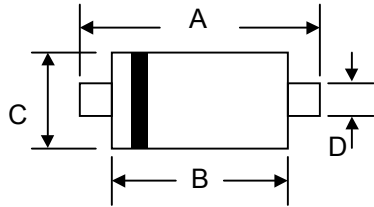


BZT52C2V4S – BZT52C51S

200mW SURFACE MOUNT ZENER DIODE

Features

Planar Die Construction
200mW Power Dissipation
2.4 – 51V Nominal Zener Voltage
5% Standard Vz Tolerance
Designed for Surface Mount Application
Plastic Material – UL Recognition Flammability Classification 94V-O



SOD-323		
Dim	Min	Max
A	2.30	2.70
B	1.75	1.95
C	1.15	1.35
D	0.25	0.35
E	0.05	0.15
G	0.70	0.95
H	0.30	—
All Dimensions in mm		

Mechanical Data

Case: SOD-323, Molded Plastic
Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
Polarity: Cathode Band
Weight: 0.004 grams (approx.)
Marking: Device Code, See Page 2
Lead Free: For RoHS / Lead Free Version, Add “-LF” Suffix to Part Number, See Page 5

Maximum Ratings @ $T_A=25^{\circ}\text{C}$ unless otherwise specified

Characteristic	Symbol	Value	Unit
Peak Pulse Power Dissipation at $T_A = 25^{\circ}\text{C}$ (Note 1)	P_d	200	mW
Forward Voltage @ $I_F = 10\text{mA}$	V_F	0.9	V
Thermal Resistance Junction to Ambient (Note 1)	R_{JA}	625	$^{\circ}\text{C/W}$
Operating and Storage Temperature Range	T_j, T_{STG}	-65 to +150	$^{\circ}\text{C}$

Note: 1. Valid provided that device terminals are kept at ambient temperature.

Type Number (Note 1)	Device Marking Code	Zener Voltage Range (Note 2)			Maximum Zener Impedance (Note 3)				Max Reverse Leakage Current		Temp. Coefficient of Zener Voltage @ I _{ZT} mV / °C	
		V _Z @ I _{ZT}			Z _{ZT} @ I _{ZT}		Z _{ZK} @ I _{ZK}		I _R	@ V _R	Min	Max
		Nom (V)	Min (V)	Max (V)	()	(mA)	()	(mA)	(μA)	(V)		
BZT52C2V4S	W1	2.4	2.28	2.52	85	5.0	600	1.0	100	1.0	-3.5	0
BZT52C2V7S	W2	2.7	2.57	2.84	83	5.0	600	1.0	75	1.0	-3.5	0
BZT52C3S	W3	3.0	2.85	3.15	95	5.0	600	1.0	50	1.0	-3.5	0
BZT52C3V3S	W4	3.3	3.14	3.47	95	5.0	600	1.0	25	1.0	-3.5	0
BZT52C3V6S	W5	3.6	3.42	3.78	95	5.0	600	1.0	15	1.0	-3.5	0
BZT52C3V9S	W6	3.9	3.71	4.10	95	5.0	600	1.0	10	1.0	-3.5	0
BZT52C4V3S	W7	4.3	4.09	4.52	95	5.0	600	1.0	5.0	1.0	-3.5	0
BZT52C4V7S	W8	4.7	4.47	4.94	78	5.0	500	1.0	5.0	1.0	-3.5	0.2
BZT52C5V1S	W9	5.1	4.85	5.36	60	5.0	480	1.0	0.1	0.8	-2.7	1.2
BZT52C5V6S	WA	5.6	5.32	5.88	40	5.0	400	1.0	0.1	1.0	-2.0	2.5
BZT52C6V2S	WB	6.2	5.89	6.51	10	5.0	150	1.0	0.1	2.0	0.4	3.7
BZT52C6V8S	WC	6.8	6.46	7.14	8.0	5.0	80	1.0	0.1	3.0	1.2	4.5
BZT52C7V5S	W D	7.5	7.13	7.88	7.0	5.0	80	1.0	0.1	5.0	2.5	5.3
BZT52C8V2S	W E	8.2	7.79	8.61	7.0	5.0	80	1.0	0.1	6.0	3.2	6.2
BZT52C9V1S	WF	9.1	8.65	9.56	10	5.0	100	1.0	0.1	7.0	3.8	7.0
BZT52C10S	WG	10	9.50	10.50	15	5.0	150	1.0	0.1	7.5	4.5	8.0
BZT52C11S	WH	11	10.45	11.55	20	5.0	150	1.0	0.1	8.5	5.4	9.0
BZT52C12S	WI	12	11.40	12.60	20	5.0	150	1.0	0.1	9.0	6.0	10
BZT52C13S	WK	13	12.35	13.65	25	5.0	170	1.0	0.1	10	7.0	11
BZT52C15S	WL	15	14.25	15.75	30	5.0	200	1.0	0.1	11	9.2	13
BZT52C16S	W M	16	15.20	16.80	40	5.0	200	1.0	0.1	12	10.4	14
BZT52C18S	W N	18	17.10	18.90	50	5.0	225	1.0	0.1	14	12.4	16
BZT52C20S	WO	20	19.00	21.00	50	5.0	225	1.0	0.1	15	14.4	18
BZT52C22S	WP	22	20.90	23.10	55	5.0	250	1.0	0.1	17	16.4	20
BZT52C24S	W R	24	22.80	25.20	80	5.0	250	1.0	0.1	18	18.4	22
BZT52C27S	W S	27	25.65	28.35	80	5.0	300	1.0	0.1	20	21.4	25.3
BZT52C30S	WT	30	28.50	31.50	80	5.0	300	1.0	0.1	22.5	24.4	29.4
BZT52C33S	WU	33	31.35	34.65	80	5.0	325	1.0	0.1	25	27.4	33.4
BZT52C36S	WW	36	34.20	37.80	90	5.0	350	1.0	0.1	27	30.4	37.4
BZT52C39S	W X	39	37.05	40.95	90	5.0	350	1.0	0.1	29	33.4	41.2
BZT52C43S	W Y	43	40.85	45.15	100	5.0	700	1.0	0.1	32	10.0	12
BZT52C47S	W Z	47	44.65	49.35	100	5.0	750	1.0	0.1	35	10.0	12
BZT52C51S	XA	51	48.45	53.55	100	5.0	750	1.0	0.1	38	10.0	12

Note: 1. Type numbers listed have standard tolerance on the nominal zener voltage of ±5%.

2. Measured with pulses t_p = 5ms.

3. f = 1KHz

