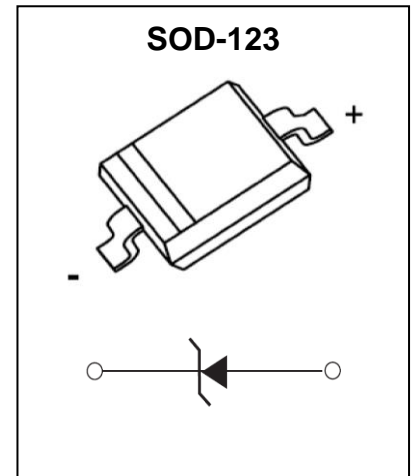




BZT52C2V4-BZT52C75 ZENER DIODE

Feature

- Planar Die Construction
- General Purpose, Medium Current
- Ideally Suited for Automated Assembly Processes
- Available in Lead Free Version



ABSOLUTE MAXIMUM RATINGS ($T_a=25^{\circ}\text{C}$ unless otherwise noted)

Parameter	Symbol	Value	Unit
Power Dissipation	P_D	0.35	W
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	340	$^{\circ}\text{C}/\text{W}$
Junction Temperature	T_J	-65 ~ +150	$^{\circ}\text{C}$
Storage Temperature	T_{STG}	-65 ~ +150	$^{\circ}\text{C}$

ELECTRICAL CHARACTERISTICS ($T_a=25^{\circ}\text{C}$ unless otherwise noted)

Type Number	Device Marking	V_Z (V) *1			I_{ZT} mA	$Z_{ZT}@I_{ZT}$ Ω	$Z_{ZK}@I_{ZK}$ Ω	I_{zk} (mA)	I_R (μA)	V_R (V)
		Nom(V)	Min(V)	Max(V)						
BZT52C2V4	WX	2.4	2.28	2.52	5	100	600	1.0	50	1.0
BZT52C2V7	W1	2.7	2.57	2.84	5	100	600	1.0	20	1.0
BZT52C3V0	W2	3.0	2.85	3.15	5	95	600	1.0	10	1.0
BZT52C3V3	W3	3.3	3.14	3.47	5	95	600	1.0	5	1.0
BZT52C3V6	W4	3.6	3.42	3.78	5	90	600	1.0	5	1.0
BZT52C3V9	W5	3.9	3.71	4.10	5	90	600	1.0	3	1.0
BZT52C4V3	W6	4.3	4.09	4.52	5	90	600	1.0	3	1.0
BZT52C4V7	W7	4.7	4.47	4.94	5	80	500	1.0	3	2.0
BZT52C5V1	W8	5.1	4.85	5.36	5	60	480	1.0	2	2.0
BZT52C5V6	W9	5.6	5.32	5.88	5	40	400	1.0	1	2.0
BZT52C6V2	WA	6.2	5.89	6.51	5	10	150	1.0	3	4.0

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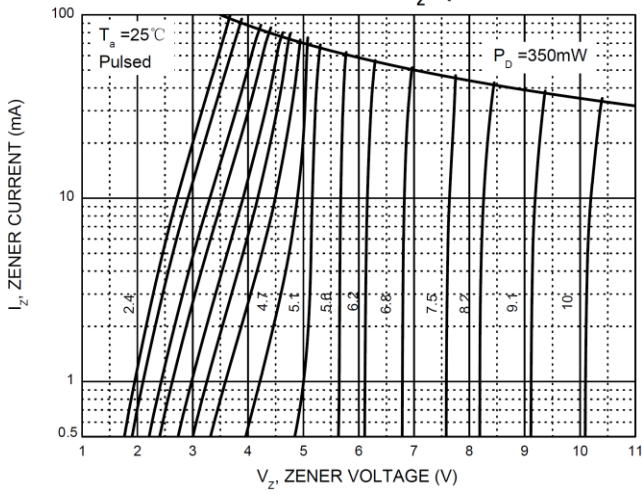
ELECTRICAL CHARACTERISTICS (Ta=25°C unless otherwise noted)

Type Number	Device Marking	Vz (V) *1			I _{ZT}	Z _{ZT} @I _{ZT}	Z _{ZK} @I _{ZK}	I _{zk} (mA)	I _R (uA)	V _R (V)
		Nom(V)	Min(V)	Max(V)	mA	Ω				
BZT52C6V8	WB	6.8	6.46	7.14	5	15	80	1.0	2	4.0
BZT52C7V5	WC	7.5	7.13	7.88	5	15	80	1.0	1	5.0
BZT52C8V2	WD	8.2	7.79	8.61	5	15	80	1.0	0.7	5.0
BZT52C9V1	WE	9.1	8.65	9.56	5	15	100	1.0	0.5	6.0
BZT52C10	WF	10.0	9.50	10.50	5	20	150	1.0	0.2	7.0
BZT52C11	WG	11.0	10.45	11.55	5	20	150	1.0	0.1	8.0
BZT52C12	WH	12.0	11.40	12.60	5	25	150	1.0	0.1	8.0
BZT52C13	WI	13.0	12.35	13.65	5	30	170	1.0	0.1	8.0
BZT52C15	WJ	15.0	14.25	15.75	5	30	200	1.0	0.1	10.5
BZT52C16	WK	16.0	15.20	16.80	5	40	200	1.0	0.1	11.2
BZT52C18	WL	18.0	17.10	18.90	5	45	225	1.0	0.1	12.6
BZT52C20	WM	20.0	19.00	21.00	5	55	225	1.0	0.1	14.0
BZT52C22	WN	22.0	20.90	23.10	5	55	250	1.0	0.1	15.4
BZT52C24	WO	24.0	22.80	25.20	5	70	250	1.0	0.1	16.8
BZT52C27	WP	27.0	25.65	28.35	2	80	300	0.5	0.1	18.9
BZT52C30	WQ	30.0	28.50	31.50	2	80	300	0.5	0.1	21.0
BZT52C33	WR	33.0	31.35	34.65	2	80	325	0.5	0.1	23.1
BZT52C36	WS	36.0	34.20	37.80	2	90	350	0.5	0.1	25.2
BZT52C39	WT	39.0	37.05	40.95	2	130	350	0.5	0.1	27.3
BZT52C43	WU	43.0	40.85	45.15	2	150	375	0.5	0.05	30.1
BZT52C47	WV	47.0	44.65	49.35	2	170	1000	0.25	0.1	36
BZT52C51	X1	51	48.45	53.55	2	180	1300	0.25	0.1	39
BZT52C56	X2	56	53.20	58.80	2	200	1400	0.25	0.1	43
BZT52C62	X3	62	58.90	65.10	2	225	1400	0.25	0.1	47
BZT52C68	X4	68	64.60	71.40	2	240	1600	0.25	0.1	52
BZT52C75	X5	75	71.25	78.75	2	265	1700	0.25	0.1	56

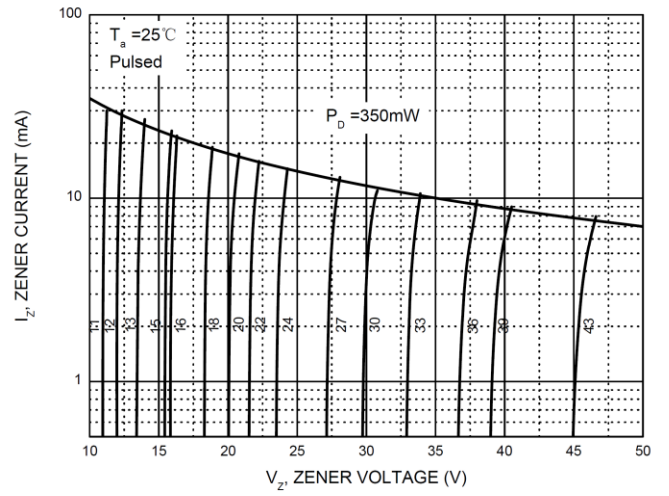
*Pulse width = 10 ms

Typical Characteristics

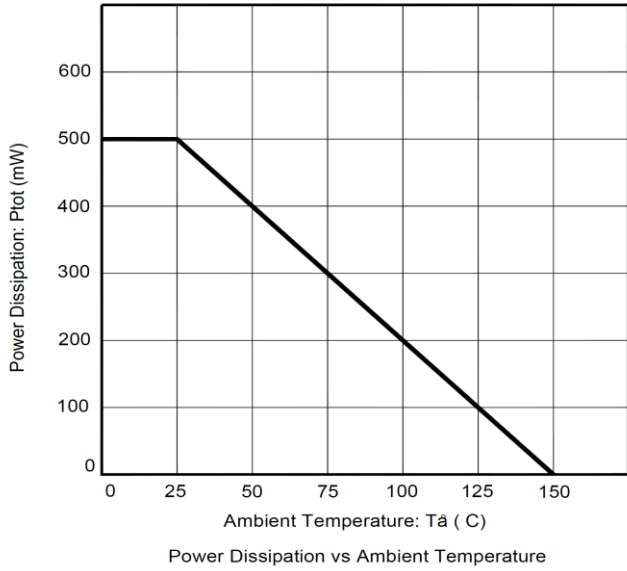
Zener Characteristics (V_z Up to 10 V)



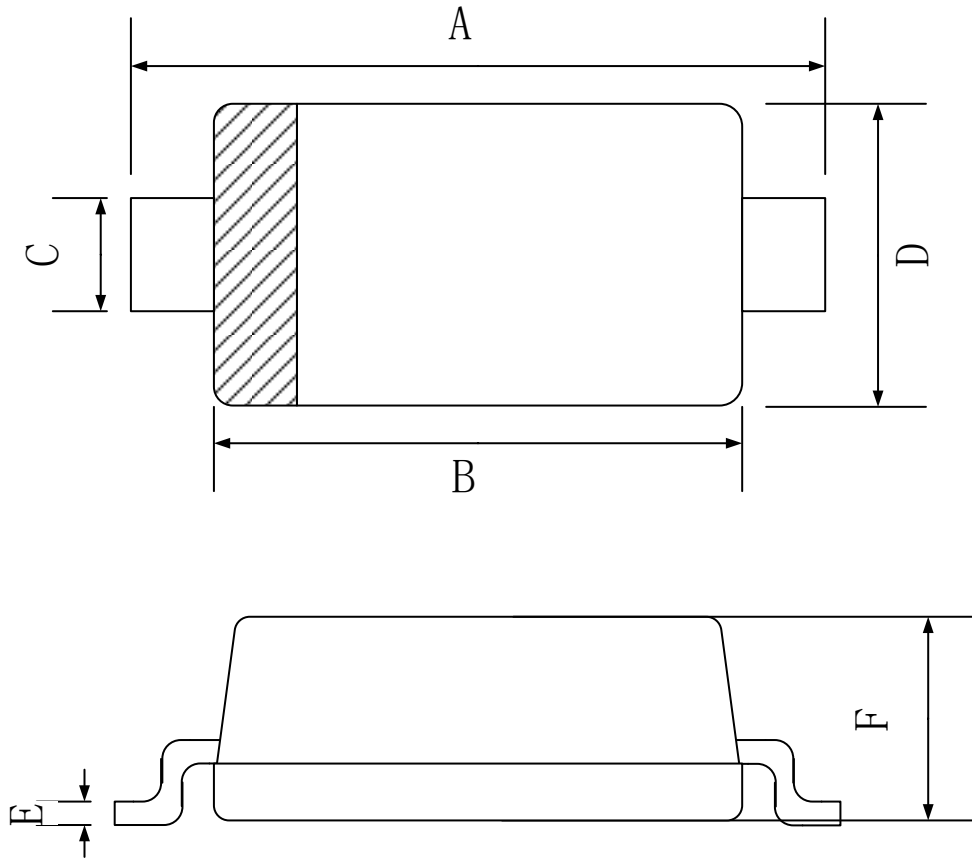
Zener Characteristics (11 V to 43 V)



Power Derating Curve



SOD-123 Package Outline Dimensions



Symbol	Dimensions In Millimeters		
	Min.	Typ.	Max.
A	3.55	3.70	3.85
B	2.55	2.65	2.75
C	0.45	0.55	0.65
D	1.55	1.60	1.65
E	0.100	0.115	0.135
F	0.90	1.05	1.20