

**FEATURES**

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

**Maximum Ratings(Ta=25℃unless otherwise specified)**

Characteristic	Symbol	Value	Unit
Forward Voltage (Note 2) @ $I_F = 10\text{mA}$	V_F	0.9	V
Power Dissipation(Note 1)	P_d	200	mW
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	625	°C/W
Operation Junction and Storage Temperature Range	T_J, T_{stg}	-55 ~ +150	°C

Notes: 1. Mounted on 1 in² FR-4 board with 2oz. Copper, in a still air environment with Ta=25 °C.
2. Short duration test pulse used to minimize self-heating effect



ZENER DIODE

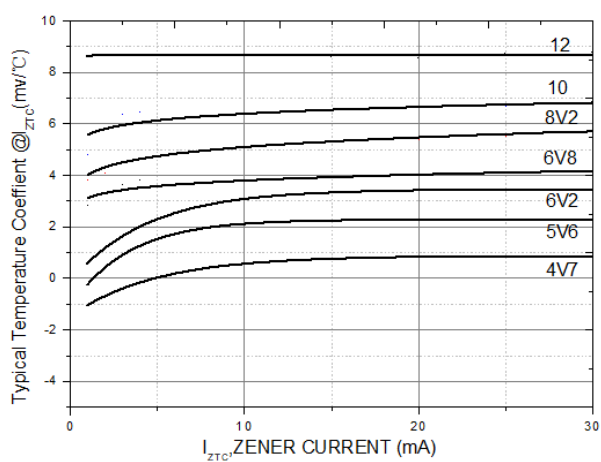
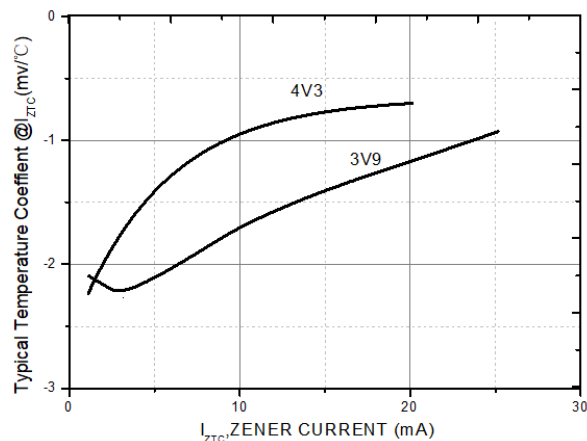
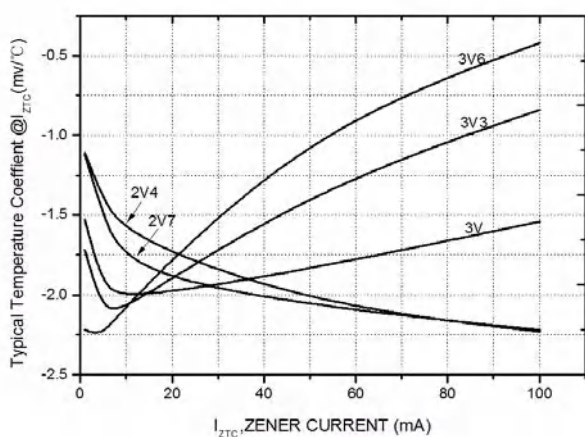
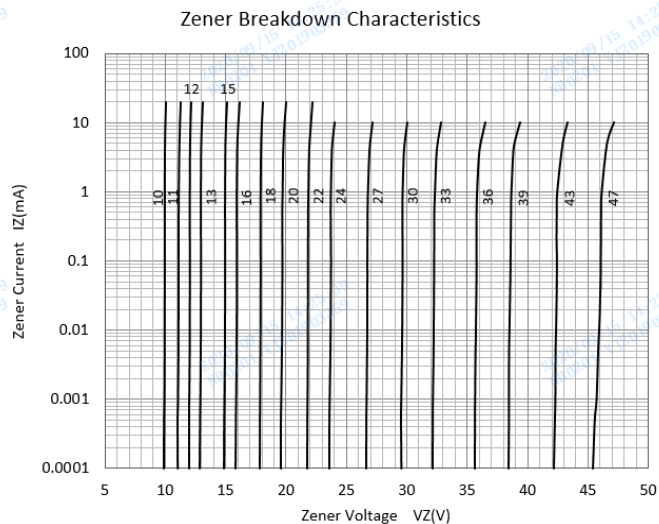
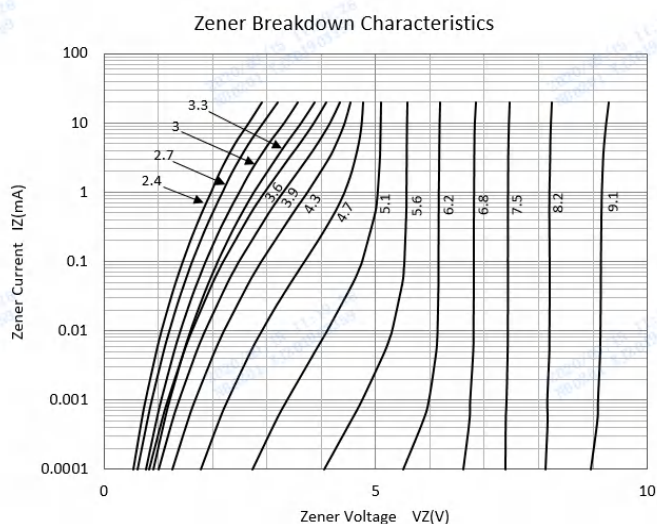
ELECTRICAL CHARACTERISTICS $T_a=25^\circ\text{C}$ unless otherwise specified

Type Number	Device Marking	V_z at I_{zT} (V)			$Z_{zt}(\Omega)$		$Z_{zk}(\Omega)$		$I_R(\mu\text{A})@V_R$		Typical Temperature Coefficient@ I_{zT} $\text{mV}/^\circ\text{C}$	
		min.	typ.	max.	$I_{zT}(\text{mA})$	max.	$I_{zk}(\text{mA})$	max.	max	$V_R(\text{V})$	Min	Max
BZT52B47S	2WV	46.06	47	47.94	5	110	1	375	0.1	35.0	42.0	51.8
BZT52B51S	2WW	50.0	51	52.0	2	180	0.5	400	0.05	35.7	46.6	57.2
BZT52B56S	2XW/X2	54.9	56	57.1	2	200	0.5	425	0.05	39.2	52.2	63.8
BZT52B62S	X3	60.8	62	63.2	2	215	0.5	450	0.05	43.4	58.8	71.6
BZT52B68S	X4	66.64	68	69.36	2	240	0.5	475	0.05	47.6	65.6	79.8
BZT52B75S	X5	73.5	75	76.5	2	255	0.5	500	0.05	52.5	73.4	88.6

- Notes: 1. Mounted on 1 in² FR-4 board with 2oz. Copper, in a still air environment with $T_a=25^\circ\text{C}$.
2. Short duration test pulse used to minimize self-heating effect
3. $f = 1\text{kHz}$

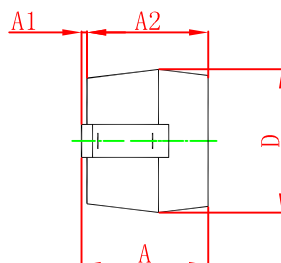
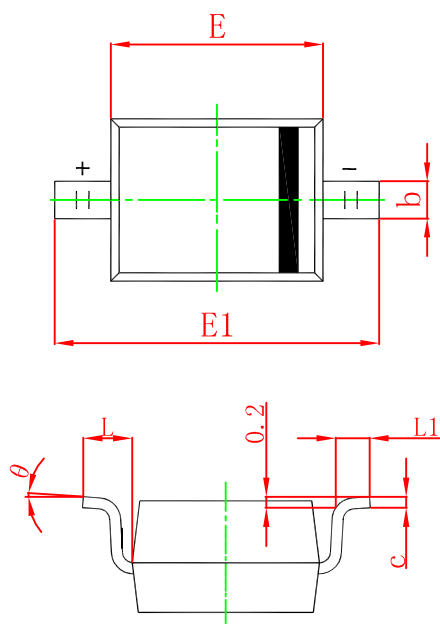


Typical Characteristics



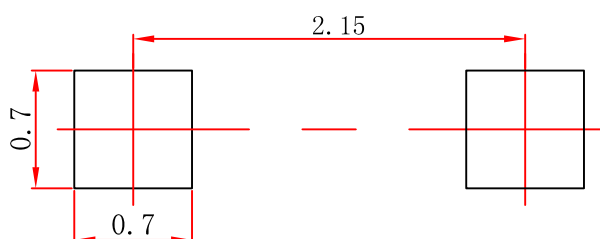


SOD-323 Package Outline Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A		1.100		0.043
A1	0.000	0.100	0.000	0.004
A2	0.800	1.000	0.031	0.039
b	0.250	0.350	0.010	0.014
c	0.080	0.150	0.003	0.006
D	1.200	1.400	0.047	0.055
E	1.600	1.800	0.063	0.071
E1	2.500	2.750	0.098	0.108
L	0.475 REF		0.019 REF	
L1	0.250	0.400	0.010	0.016
θ	0°	8°	0°	8°

SOD-323 Suggested Pad Layout

**Note:**

1. Controlling dimension: in millimeters.
2. General tolerance: $\pm 0.05\text{mm}$.
3. The pad layout is for reference purposes only.