

**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 = 10mA	V _F	0.9	V
Power Dissipation(Note 1)	P _d	200	mW
Thermal Resistance from Junction to Ambient	R _{θJA}	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

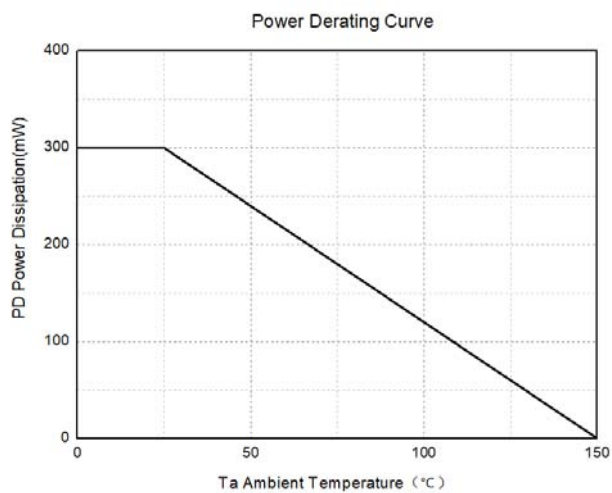
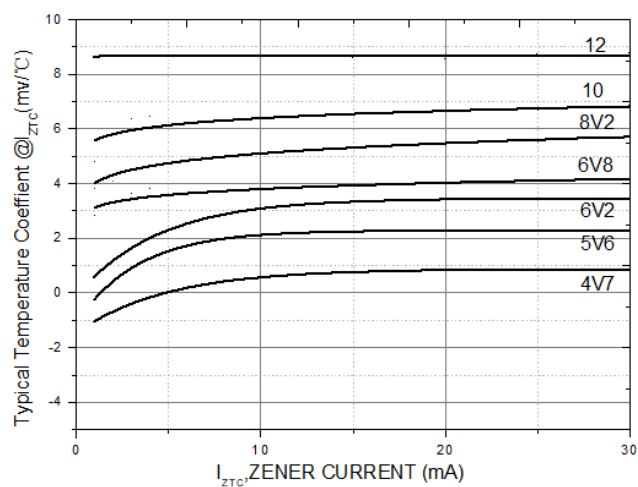
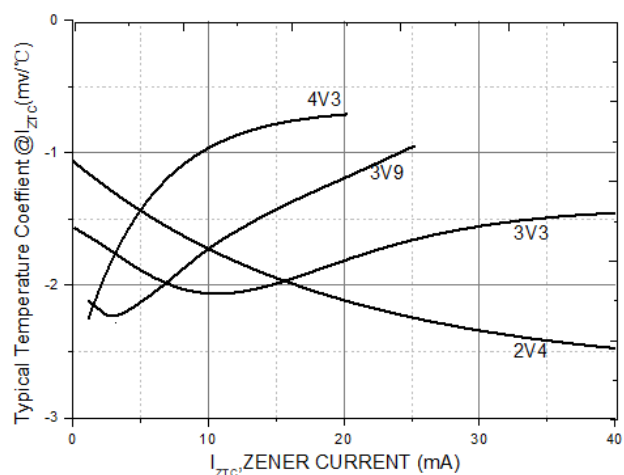
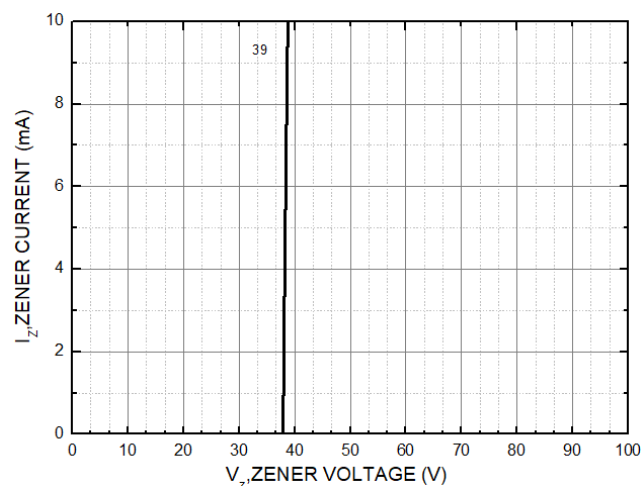
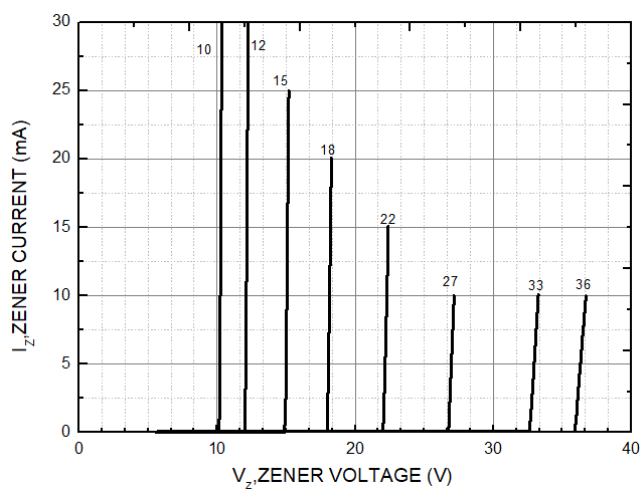
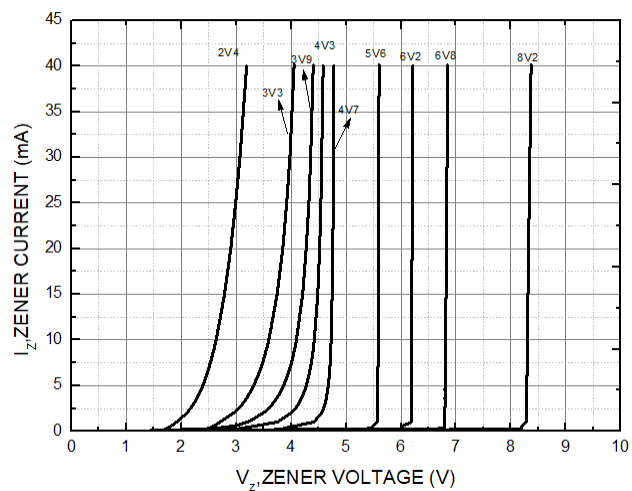
ELECTRICAL CHARACTERISTICS $T_a=25^\circ\text{C}$ unless otherwise specified

Device	Marking	Zener Voltage Range				Maximum Zener Impedance			Maximum Reverse Current		Typical Temperature coefficient @ IZTC=mV/℃		Test Current IZTC
		Vz@Izt			Izt	Zzt @Izt	Zzk @Izk	Izk	IR	VR			
		Nom(V)	Min(V)	Max(V)	mA	Ω			mA	uA	V	Min	Max
BZT52C47S	WV	47	44.0	50.0	2	100	750	1.0	0.1	35.0	10.0	12.0	5
BZT52C51S	WW	51	48.0	54.0	2	100	750	1.0	0.1	38.0	10.0	12.0	5
BZT52C56S	XW	56	52.0	60.0	2	135	700	1.0	0.1	39.0	10.0	12.0	5
BZT52C62S	6E	62	58.0	66.0	2	200	1000	1.0	0.2	47.0	10.0	12.0	5
BZT52C68S	6F	68	64.0	72.0	2	250	1000	1.0	0.2	52.0	10.0	12.0	5
BZT52C75S	6H	75	70.0	79.0	2	300	1000	1.0	0.2	57	10.0	12.0	5

- 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. $f = 1\text{kHz}$

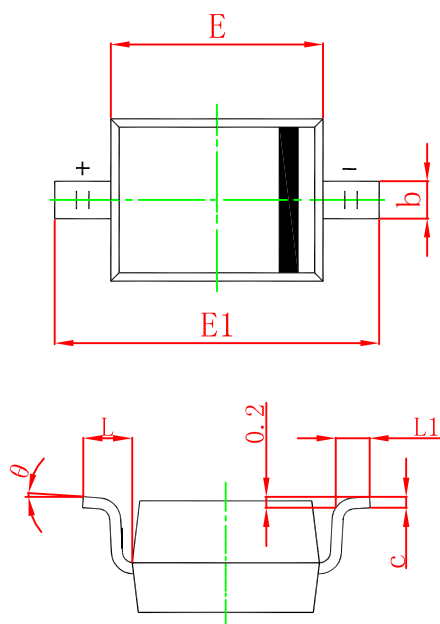


Typical Characteristics



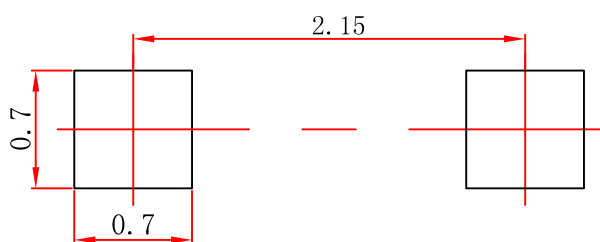


SOD-323 Package Outline Dimensions



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.