

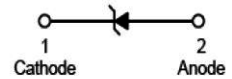
Surface Mount Zener Diode

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Features:

- Planar Die Construction
- General Purpose, Medium Current
- Ideally Suited For Automated Assembly Processes



SOD-323

Applications:

Zener diode

Ultra-small surface mount package

Max. Rating @ T_A = 25°C unless otherwise specified

Parameter	Symbol	Limits	Unit
Forward voltage @ I _F = 10mA	V _F	0.9	V
Power dissipation	P _D	200	mW
Thermal resistance junction to ambient air	R _{θJA}	625	°C/W
Operating junction temperature range	T _j	150	°C
Storage temperature range	T _{STG}	-65 to +150	°C

Notes : Valid provided that device terminals are kept at ambient temperature
Short duration test pulse used in minimize self-heating effect
f = 1kHz

Electrical Characteristics @ T_A = 25°C unless otherwise specified

Marking Code	Zener Voltage Range				Max. Zener Impedance			Max. Reverse Current		Typical Temperature Coefficient@ I _{ZTC} mV/°C	
	V _Z @ I _{ZT}			I _{ZT}	Z _{zT} @I _{ZT}	Z _{zK} @I _{ZK}	I _{ZK}	I _R	@V _R		
	Nom(V)	Min(V)	Max(V)	mA	Ω	mA	μA	V		Min.	Max.
WH	12	11.4	12.7	5	25	150	1	0.1	8	6	10

Note : Valid provided that device terminals are kept at ambient temperature
Tested with pulses, period = 5ms, pulse width = 300μs
f = 1kHz

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Typical Characteristics @ $T_A = 25^\circ\text{C}$ unless otherwise specified

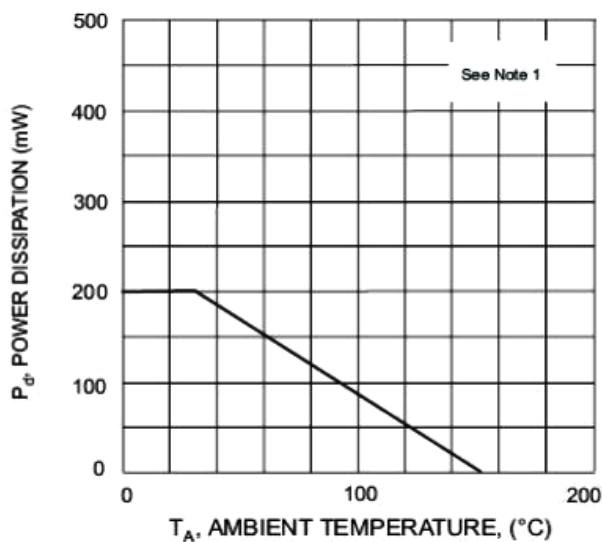


Fig. 1 Power Derating Curve

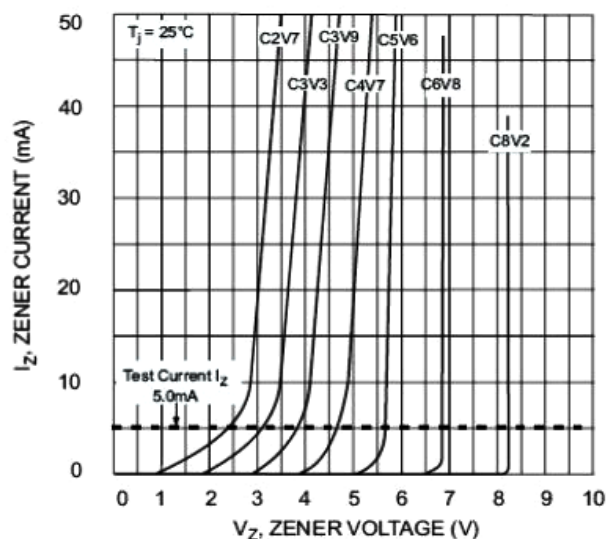


Fig. 2 Zener Breakdown Characteristics

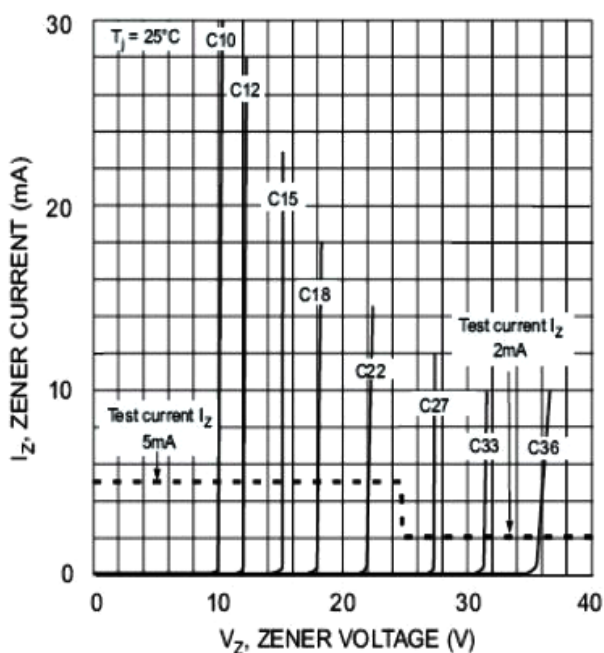


Fig. 3 Zener Breakdown Characteristics

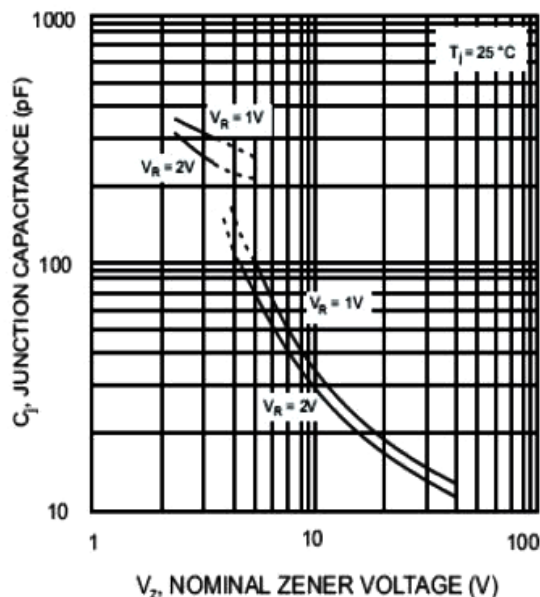
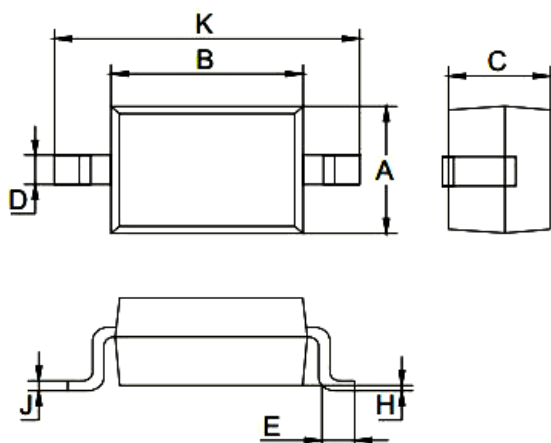


Fig. 4 Junction Capacitance vs Nominal Zener Voltage

Surface Mount Zener Diode

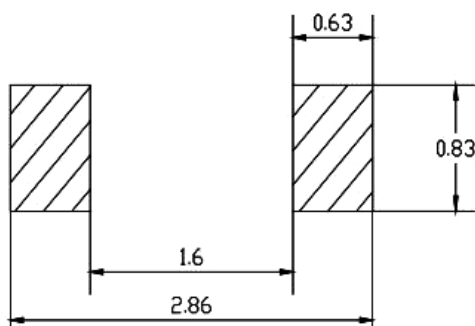
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Plastic surface mounted package



SOD-323		
Dim	Min	Max
A	1.275	1.325
B	1.675	1.725
C	0.9 Typical	
D	0.25	0.35
E	0.27	0.37
H	0.02	0.1
J	0.1 Typical	
K	2.6	2.7
All Dimensions in mm		

Soldering Footprint



Unit : mm

Package Information

Device	Package	Shipping
BZT52C12S-7-F	SOD-323	3,000 / Tape & Reel

Part Number Table

Description	Part Number
Surface mount zener diode	BZT52C12S-7-F

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