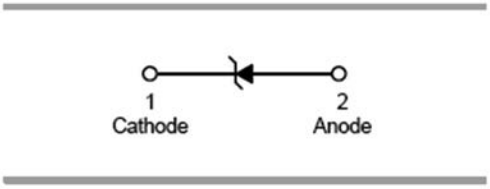
Surface Mount
Zener Diode



SOD-323

Features:

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

Applications:

- Zener diode
- Ultra-small surface mount package

Maximum Rating @ T_A = 25°C unless otherwise specified

Characteristic	Symbol	Value	Unit
Forward voltage @ I_F = 10mA	V_F	0.9	V
Power dissipation	P_D	200	mW
Thermal resistance, junction to ambient air	$R_{\theta jA}$	625	°C/W
Junction temperature	T_j	150	°C
Storage temperature range	T_{stg}	-65 to +150	°C

Note 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

Type Number	Marking Code	Zener Voltage Range				Maximum Zener Impedance			Maximum 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
BZT52C4V7S	W7	4.7	4.4	5	5	80	500	1	3	2	-3.5	0.2

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

Typical Characteristics @ T_A = 25°C unless otherwise specified

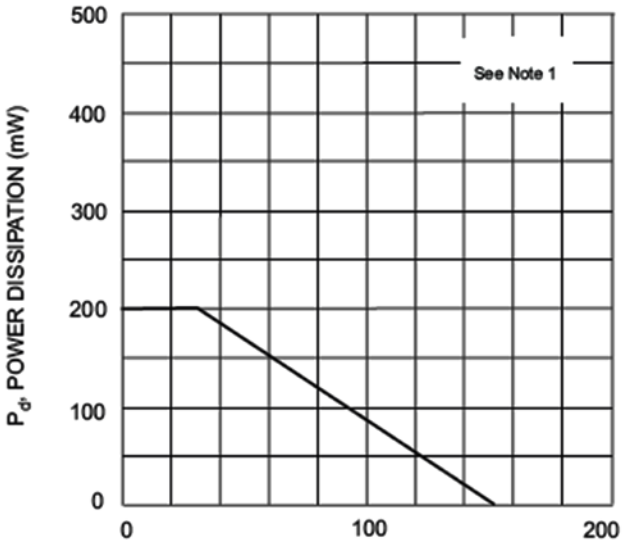


Fig. 1 Power Derating Curve

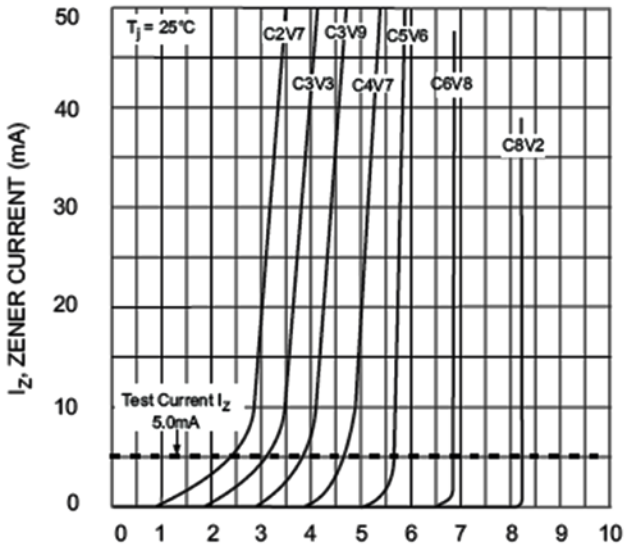


Fig. 2 Zener Breakdown Characteristics

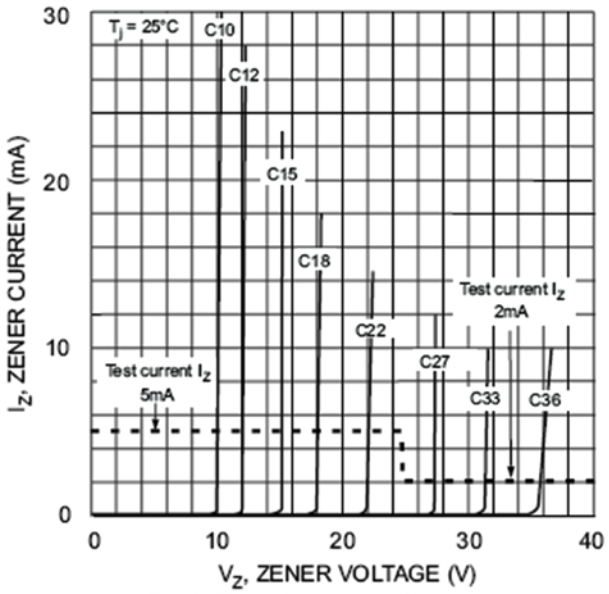


Fig. 3 Zener Breakdown Characteristics

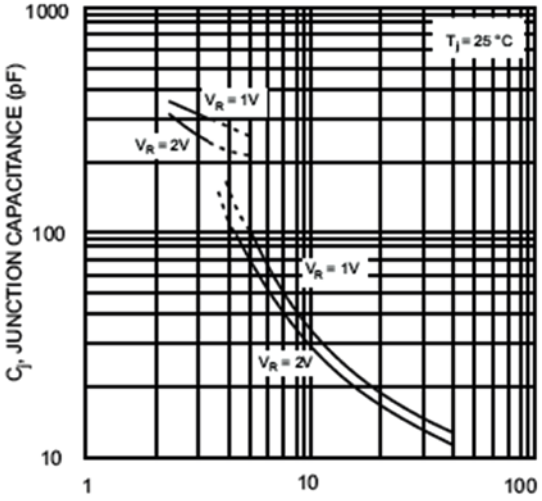
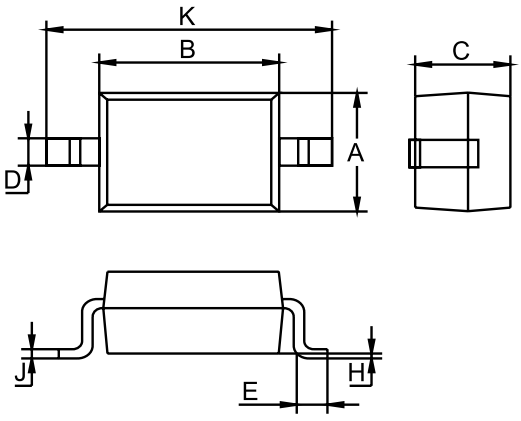


Fig. 4 Junction Capacitance vs Nominal Zener Voltage

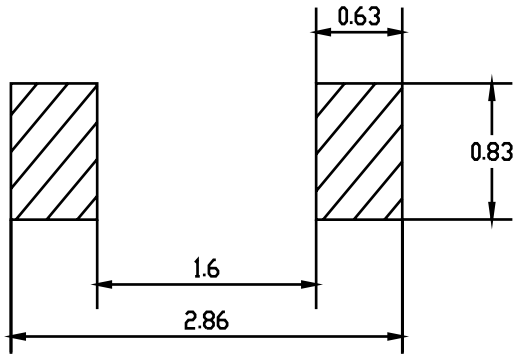
Package Outline

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



Dimensions : Millimetres

Package Information

Device	Package	Shipping
BZT52C4V7S-7-F	SOD-323	3,000/Tape & Reel

Part Number Table

Description	Part Number
Surface Mount Zener Diode	BZT52C4V7S-7-F

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