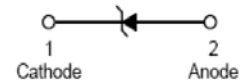


Surface Mount Zener Diode



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 Ratings:

Ratings at 25°C unless otherwise specified.

Characteristic	Symbol	Value	Unit
Forward voltage at $I_F=10\text{mA}$	V_F	0.9	V
Power dissipation	P_D	200	mW
Thermal resistance, junction to ambient air	$R_{\theta JA}$	625	°C/W
Junction and storage temperature range	T_j, 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
 $f = 1\text{kHz}$

Surface Mount Zener Diode



Electrical Characteristics:

Ratings at 25°C unless otherwise specified.

Part Number	Marking Code	Zener Voltage Range				Max. Zener Impedance			Max. Reverse Current		Temperature Coefficient of zener voltage @ I_{ZTC} mV/°C	
		$V_Z@I_{ZT}$			I_{ZT}	$Z_{ZT}@I_{ZT}$	$Z_{ZK}@I_{ZK}$	I_{ZK}	I_R	@ V_R	Min.	Max.
		Nom(V)	Min(V)	Max(V)	mA	Ω	mA	μA	V			
BZT52C15S-7-F	WJ	15	13.8	15.6	5	30	200	1	0.1	10.5	9.2	13

Note:

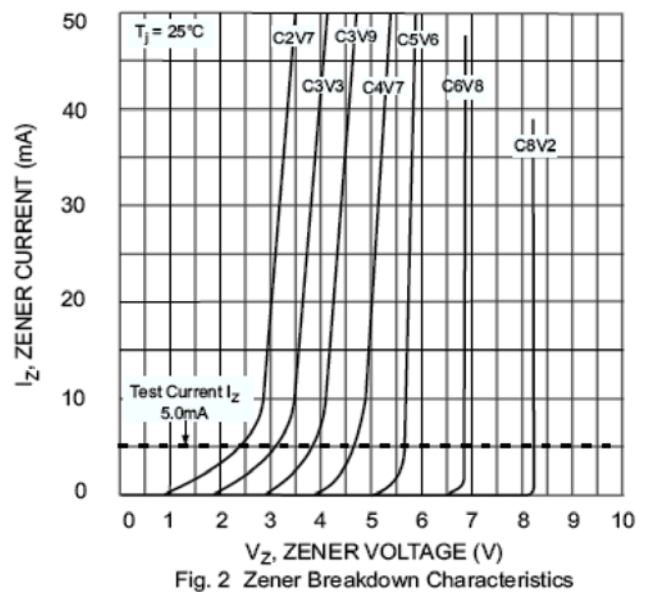
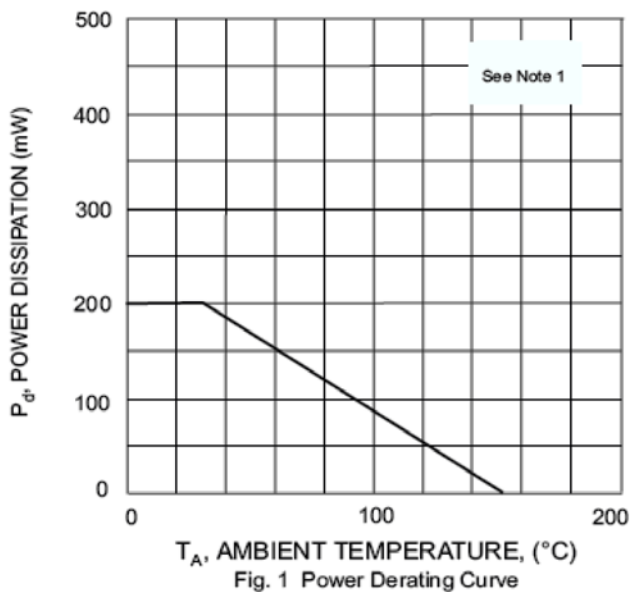
Valid provided that device terminals are kept at ambient temperature

Tested with pulses, period=5ms, pulse width = 300 μ s

f = 1kHz

Typical Characteristics:

$T_A = 25^\circ C$ unless otherwise specified.



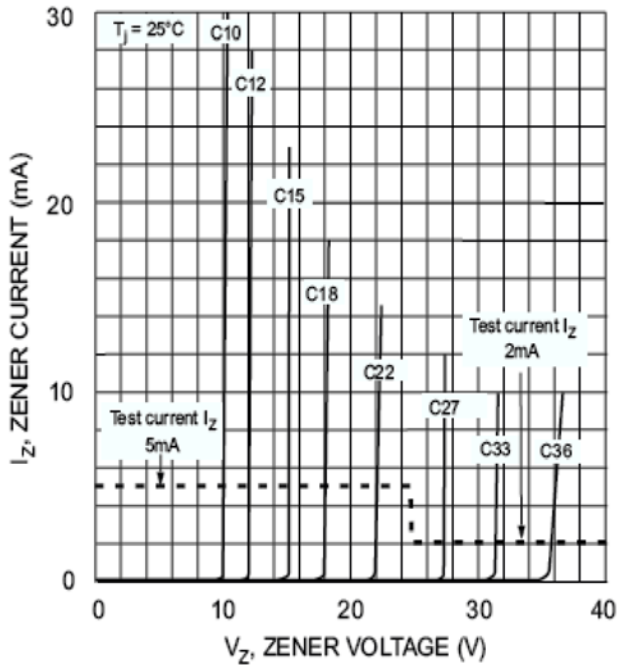


Fig. 3 Zener Breakdown Characteristics

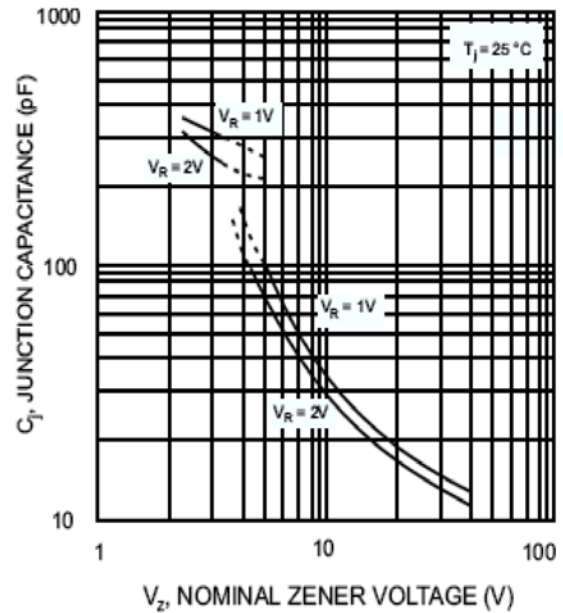
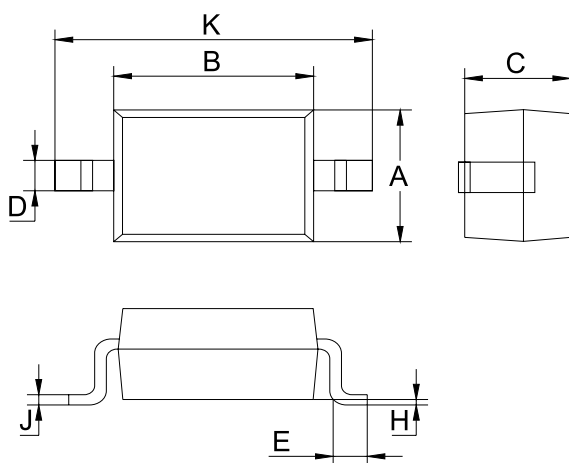


Fig. 4 Junction Capacitance vs Nominal Zener Voltage

Package Outline:

Plastic surface mounted package



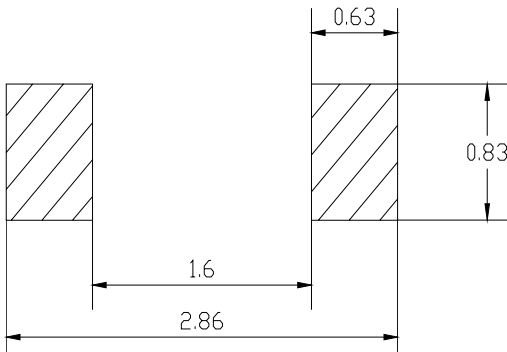
SOD-323		
Dim.	Min.	Max.
A	1.275	1.325
B	1.675	1.725
C	0.9 Typ.	
D	0.25	0.35
E	0.27	0.37
H	0.02	0.1
J	0.1 Typ.	
K	2.6	2.7

Dimensions : Millimetres

Surface Mount Zener Diode



Soldering Footprint:



Dimensions : Millimetres

Package Information:

Device	Package	Shipping
BZT52C15S-7-F	SOD-323	3,000 / Tape & Reel

Part Number Table

Description	Part Number
Surface Mount Zener Diode	BZT52C15S-7-F

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