

MM3Zxxx-5
Silicon Planar Zener Diodes

Revision:B

General Description

Silicon planar zener diode in a small plastic SMD SOD-323 package.

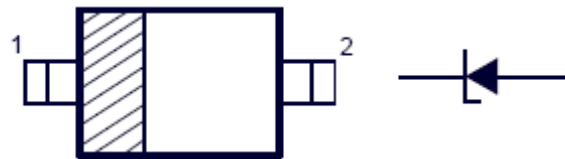
Features

- Total power dissipation: max. 500mW
- Small plastic package suitable for surface mounted design
- Tolerance approximately $\pm 5\%$

Functional diagram



SOD-323



Note: 1-Cathode;2-Anode

Absolute Maximum Ratings ($T_a=25^\circ\text{C}$)

Symbol	Parameter	Value	Unit
	Zener Current see Table "Characteristics"		
P_{tot}	Power Dissipation	500	mW
T_j	Junction Temperature	175	$^\circ\text{C}$
T_s	Storage Temperature Range	-55 to +175	$^\circ\text{C}$

Characteristics at $T_{amb}=25^\circ\text{C}$

	Symbol	Min.	Typ.	Max.	Unit
Thermal Resistance Junction to Ambient Air	R_{thA}	---	---	0.3	K/mW
Forward Voltage at $I_F=100\text{mA}$	V_F	---	---	1	V

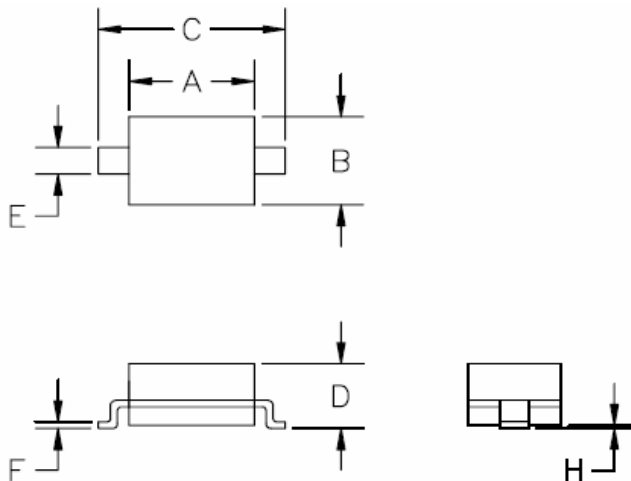
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Electrical Characteristics

Type	Zener Voltage Range			Dynamic Impedance		Revers Leakage Current		Temp. coefficient of Zener Voltage
	V_{znom}	I_{zT} for V_{zT}		$Z_z(Max)$ at I_z		$I_R(Max)$ at V_R		TKvz %/K
	V	mA	V	Ω	mA	μA	V	
MM3Z5V1-5	5.1	5	5.1...5.6	130	5	2	4.2	-0.02...+0.02
MM3Z5V6-5	5.6	5	5.2...6.0	80	5	2	4.5	-0.02...+0.02
MM3Z6V2-5	6.2	5	5.8...6.6	50	5	2	5.0	-0.02...+0.02
MM3Z6V8-5	6.8	5	6.4...7.2	30	5	2	3.5	0.03...0.07

- 1) V_z is tested with pulses (20 ms).
- 2) Z_z is measured at I_z by given a very small A.C. current signal.

SOD-323 Mechanical Data



Dim	Dimensions			
	Inches		Mil	
	Min	Max	Min	Max
A	0.060	0.071	1.5	1.8
B	0.045	0.054	1.2	1.4
C	0.060	0.107	2.3	2.7
D	-	0.043	-	1.1
E	0.012	0.016	0.3	0.4
F	0.004	0.010	0.10	0.25
H	-	0.004	-	0.10

CONTROLLING DIMENSION: MILLIMETERS

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