NEW PRODUCT

Maximum Ratings (@T_A = +25°C, unless otherwise specified.)

Single phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

Characteristic	Symbol	Value	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_{RM}	60	V
Average Rectified Output Current	I_O	2	A
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load	I_{FSM}	50	A

Thermal Characteristics

Characteristic	Symbol	Value	Unit
Typical Thermal Resistance Junction to Ambient (Note 5)	$R_{\theta JA}$	100	°C/W
Typical Thermal Resistance Junction to Case (Note 5)	$R_{\theta JC}$	50	°C/W
Operating and Storage Temperature Range	T_J, T_{STG}	-55 to +150	°C

Electrical Characteristics (@T_A = +25°C, unless otherwise specified.)

Characteristic	Symbol	Min	Typ	Max	Unit	Test Condition
Forward Voltage Drop	V_F	— —	0.55 0.52	0.65 —	V	I_F = 2A, T_J = +25°C I_F = 2A, T_J = +125°C
Leakage Current (Note 6)	I_R	— —	0.02 14	0.2 —	mA	V_R = 60V, T_J = +25°C V_R = 60V, T_J = +125°C
Typical Capacitance	C_T	—	75	—	pF	V_R = 4.0V, f = 1MHz

Notes: 5. Device mounted on FR-4 substrate, 0.4" x 0.5", 2oz, single-sided, PC boards with 0.2" x 0.25" copper pad.
6. Short duration pulse test used to minimize self-heating effect.

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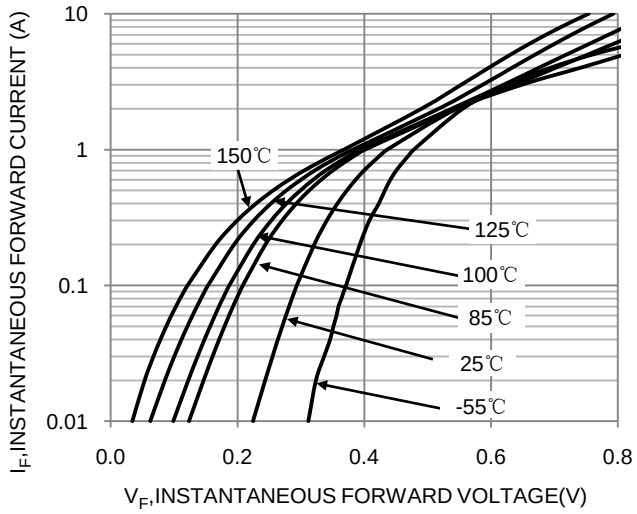

Figure 1. Typical Forward Characteristics

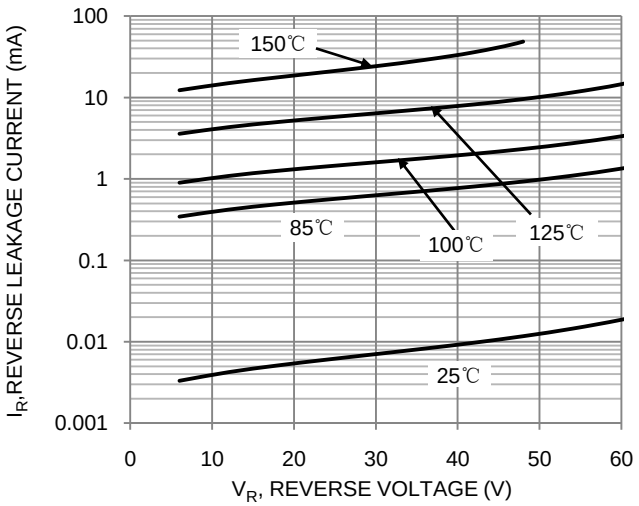

Figure 2. Typical Reverse Characteristics

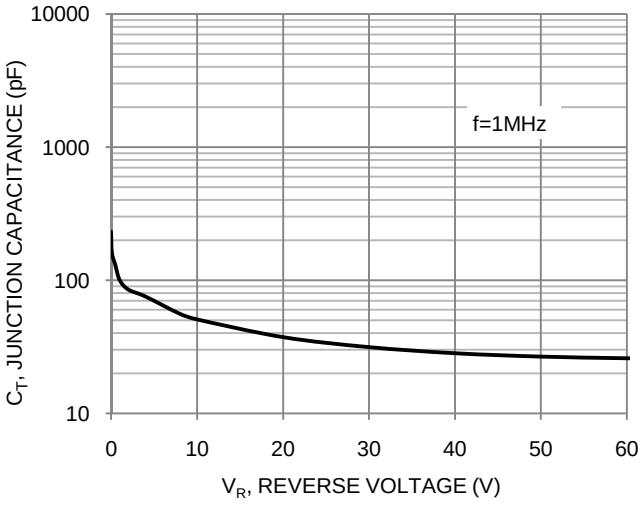

Figure 3. Typical Junction Capacitance

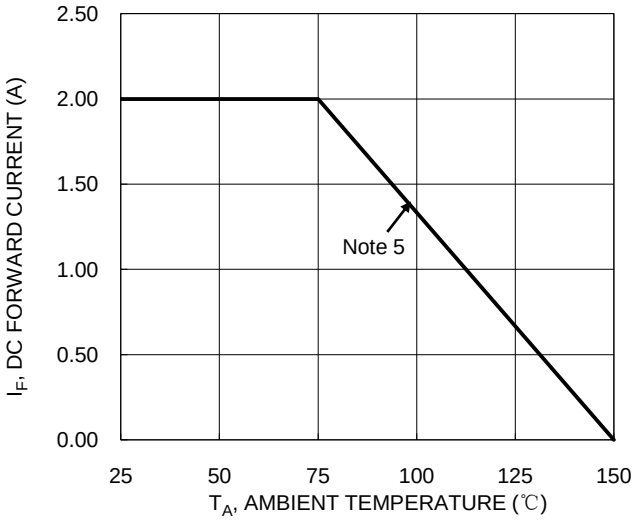

Figure 4. DC Forward Current Derating

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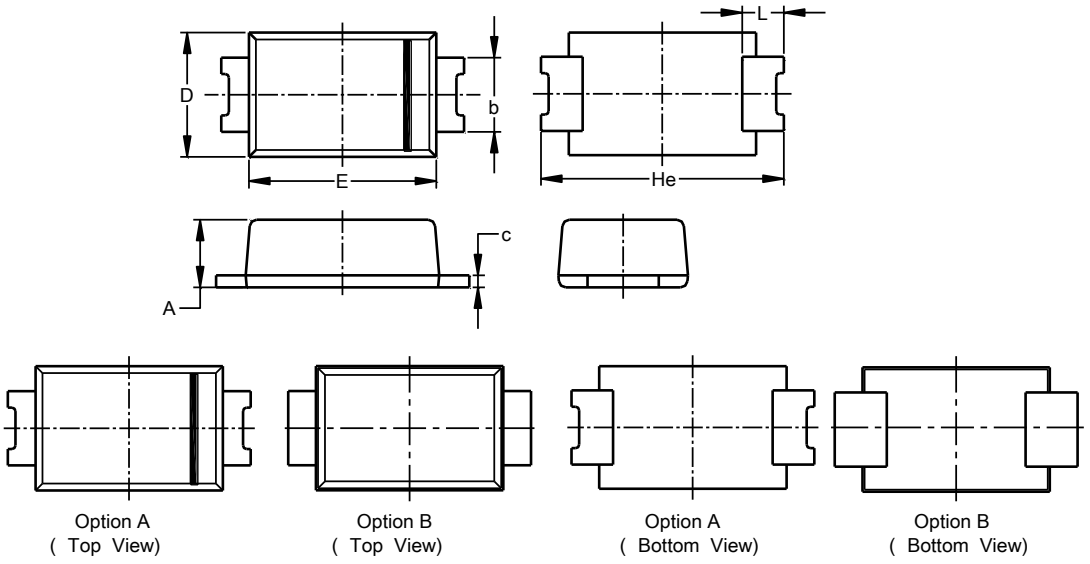
Package Outline Dimensions

Please see http://www.diodes.com/package-outlines.html for the latest version.

SOD123F (Generic)

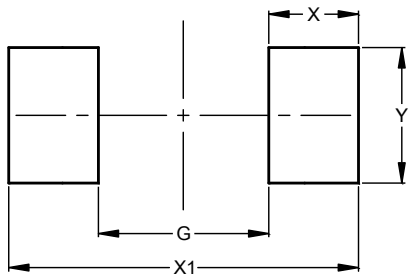


SOD123F (Generic)			
Dim	Min	Max	Typ
A	0.81	1.15	-
b	0.80	1.35	-
c	0.05	0.30	-
D	1.70	1.90	1.80
E	2.60	2.80	2.70
He	3.30	3.70	3.50
L	0.35	0.85	-
All Dimensions in mm			

Suggested Pad Layout

Please see http://www.diodes.com/package-outlines.html for the latest version.

SOD123F (Generic)



Dimensions	Value (in mm)
G	1.90
X	1.00
X1	3.90
Y	1.50

NEW PRODUCT

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