

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

Characteristic	Symbol	Value	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V _{RRM}	40	V
Average Rectified Output Current	I _O	3	A
Non-Repetitive Peak Forward Surge Current 8.3mS	I _{FSM}	50	A

Thermal Characteristics

Characteristic	Symbol	Value	Unit
Maximum Thermal Resistance Junction to Ambient (Note 5)	R _{θJA}	100	°C/W
Maximum Thermal Resistance Junction to Case (Note 5)	R _{θJC}	35	°C/W
Operating and Storage Temperature Range	T _J , T _{STG}	-65 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	—	0.35 0.44	0.39 0.49	V	I _F = 1A, T _J = +25°C I _F = 3A, T _J = +25°C
Leakage Current (Note 6)	I _R	—	70 16	180 60	μA mA	V _R = 40V, T _J = +25°C V _R = 40V, T _J = +125°C

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

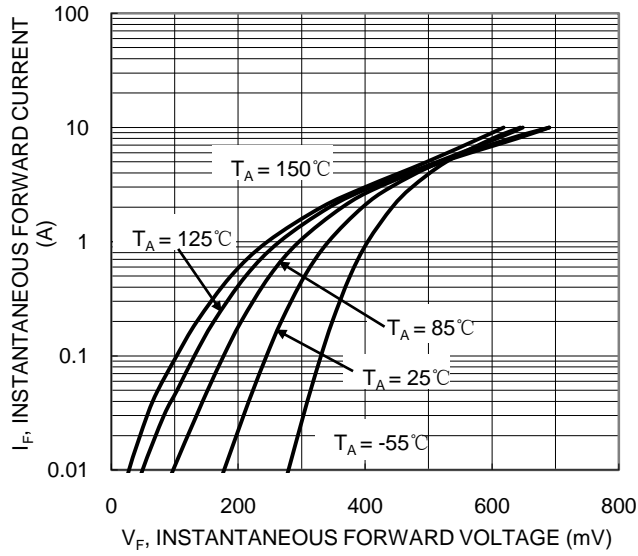


Figure 1. Typical Forward Characteristics

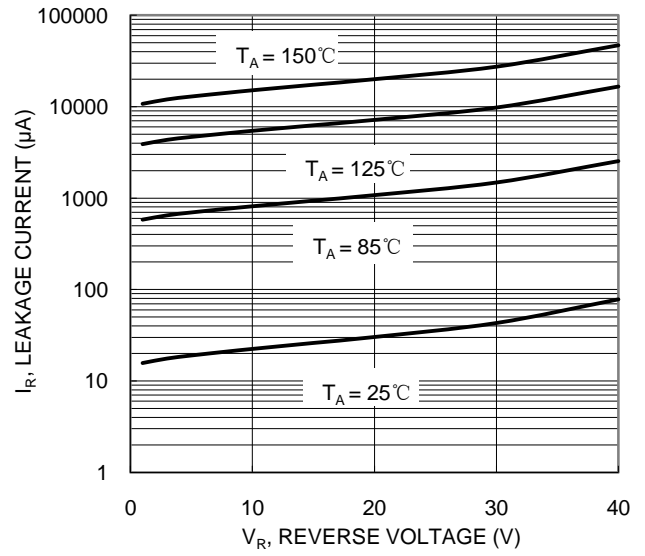


Figure 2. Typical Reverse Characteristics

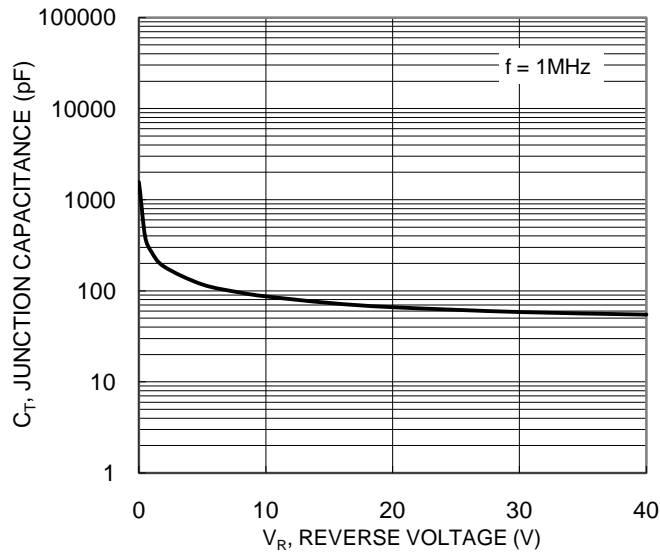


Figure 3. Typical Junction Capacitance

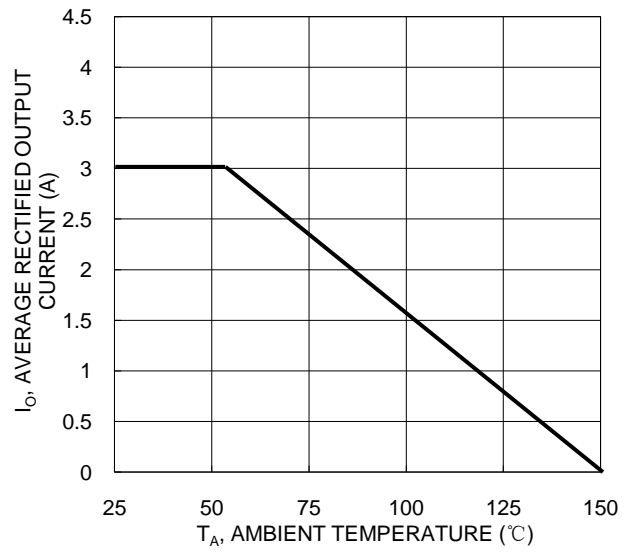
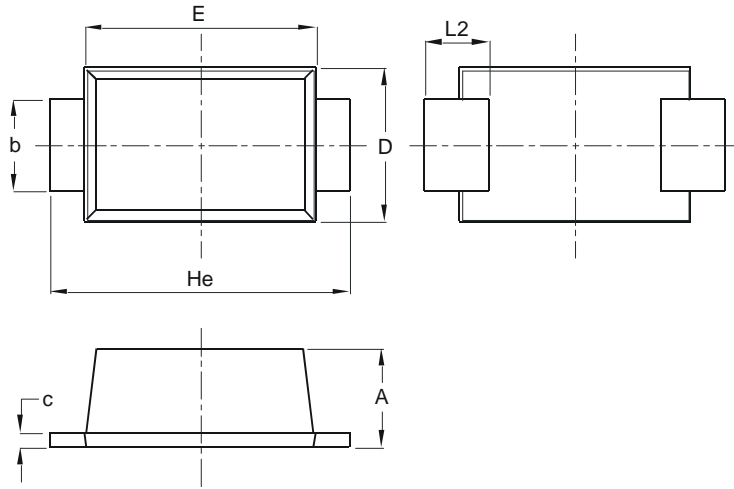


Figure 4. DC Forward Current Derating

Package Outline Dimensions

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

SOD123F

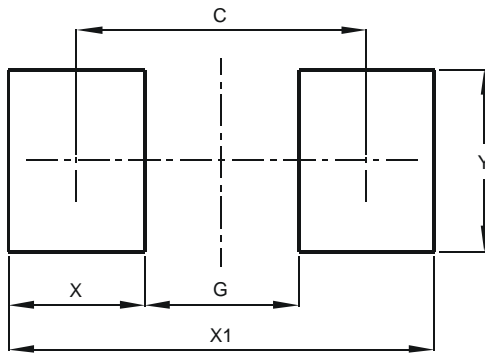


SOD123F			
Dim	Min	Max	Typ
A	0.81	1.15	-
b	0.80	1.35	-
c	0.05	0.30	-
D	1.70	1.90	1.80
E	2.60	2.80	2.70
He	3.30	3.70	3.50
L2	0.35	0.85	-
All Dimensions in mm			

Suggested Pad Layout

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

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Dimensions	Value (in mm)
C	2.86
G	1.52
X	1.34
X1	4.20
Y	1.80

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