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_R	1200	V
RMS Reverse Voltage	$V_{R(RMS)}$	840	V
Average Rectified Output Current @ T_T = +100°C	I_O	1.0	A
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load	I_{FSM}	30	A
I^2t Rating for Fusing (t < 8.3ms)	I^2t	3.74	A^2S

Thermal Characteristics

Characteristic	Symbol	Value	Unit
Typical Thermal Resistance, Junction to Ambient (Note 5)	$R_{\theta JA}$	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
Reverse Breakdown Voltage(Note 7)	@ I_R = 5μA	$V_{(BR)R}$	1200	—	—	V
Forward Voltage	@ I_F = 1.0A	V_F	—	0.94	1.1	V
Peak Reverse Leakage Current at Rated DC Blocking Voltage	@ T_A = +25°C @ T_A = +125°C	I_R	— —	0.23 15	5.0 100	μA
Typical Total Capacitance (Note 6)		C_T	—	6	—	pF

Notes: 5. Thermal resistance junction to ambient at 0.375 inch (9.5mm) lead length.
6. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
7. Short duration pulse test used to minimize self-heating effect.

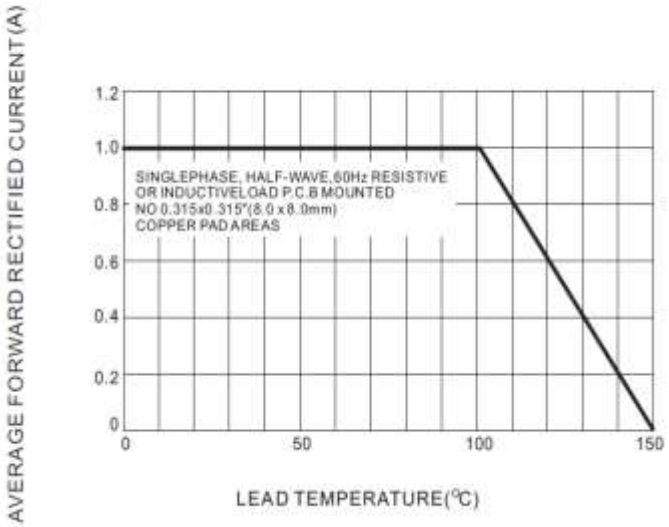


Figure 1 Maximum Average Forward Current Derating

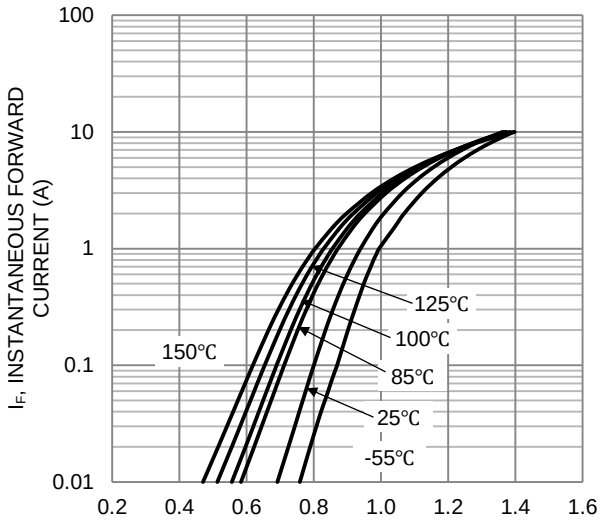


Figure 2 Typical Forward Characteristics

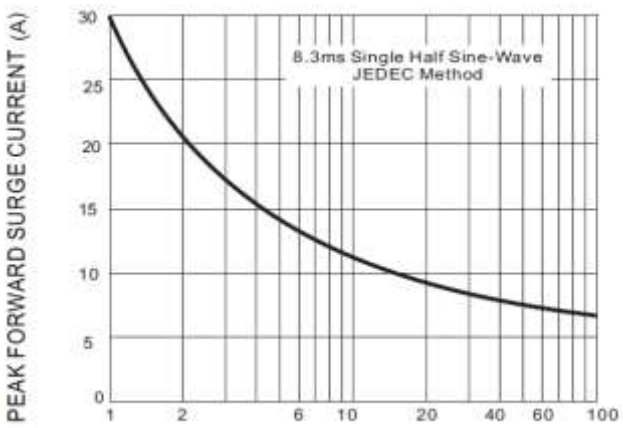


Figure 3 Maximum Non-Repetitive Surge Current

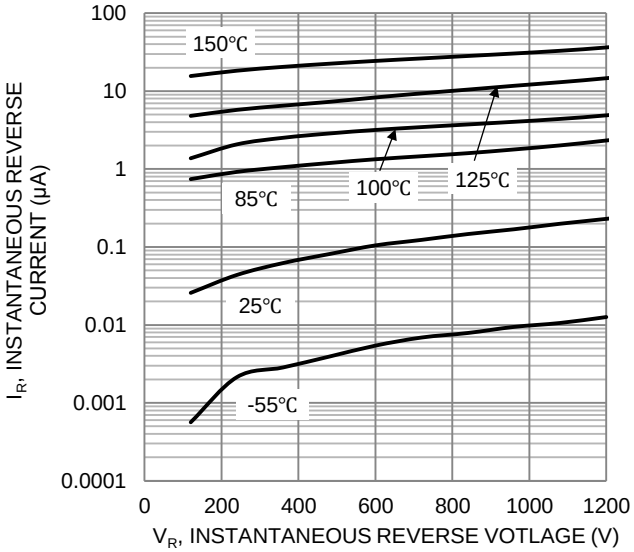


Figure 4 Typical Reverse Characteristics

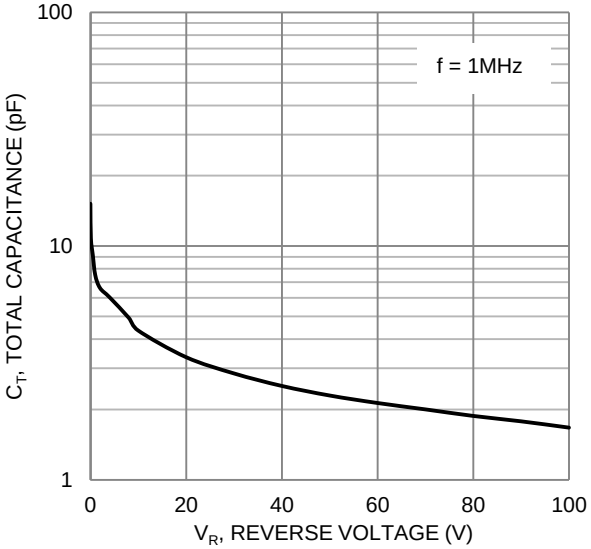
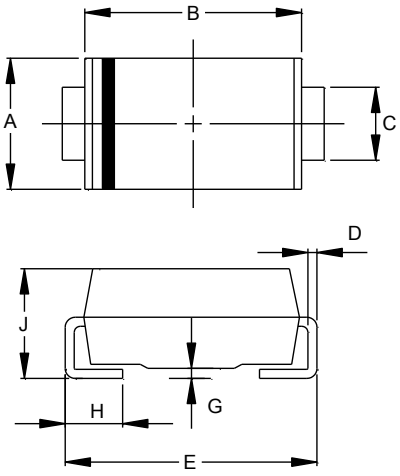


Figure 5 Typical Total Capacitance

Package Outline Dimensions

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

SMA

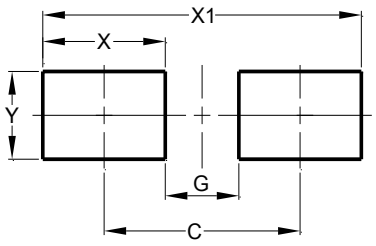


SMA		
Dim	**Min**	**Max**
A	2.29	2.92
B	4.00	4.60
C	1.27	1.63
D	0.15	0.31
E	4.80	5.59
G	0.05	0.20
H	0.76	1.52
J	1.96	2.40
All Dimensions in mm		

Suggested Pad Layout

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

SMA



Dimensions	Value (in mm)
C	4.00
G	1.50
X	2.50
X1	6.50
Y	1.70

Note: For high voltage applications, the appropriate industry sector guidelines should be considered with regards to creepage and clearance distances between device terminals and PCB tracking.

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