

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 @ I _R = 1.0mA DC Blocking Voltage	V _{RRM} V _{RWM} V _R	40	V
Average Rectified Output Current	I _O	1.0	A
Repetitive Peak Forward Current t _p ≤ 1ms, δ ≤ 0.5	I _{FRM}	1.5	A
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load	I _{FSM}	25	A

Thermal Characteristics

Characteristic	Symbol	Value	Unit
Power Dissipation (Note 5)	P _D	450	mW
Typical Thermal Resistance Junction to Ambient (Note 5)	R _{θJA}	222	°C/W
Operating and Storage Temperature Range	T _J , T _{STG}	-65 to +125	°C

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

Characteristic	Symbol	Min	Typ	Max	Unit	Test Condition
Reverse Breakdown Voltage (Note 6)	V _{(BR)R}	40	—	—	V	I _R = 1.0mA
Forward Voltage	V _F	—	—	0.320 0.450 0.750	V	I _F = 0.1A I _F = 1.0A I _F = 3.0A
Reverse Leakage Current (Note 6)	I _R	—	—	1.0 10 50 1 2 15 75 1.5 3	mA mA μA mA μA μA mA	V _R = 40V, T _A = +25°C V _R = 40V, T _A = +100°C V _R = 4V, T _A = +25°C V _R = 4V, T _A = +100°C V _R = 6V, T _A = +25°C V _R = 6V, T _A = +100°C
Total Capacitance	C _T	—	50	60	pF	V _R = 4V, f = 1.0MHz

- Notes: 5. Device mounted on FR-4 PC Board, 2"x2", 2 oz. copper, single sided, cathode pad dimensions 0.75"x1.0", anode pad dimensions 0.25"x1.0".
6. Short duration pulse test used to minimize self-heating effect.

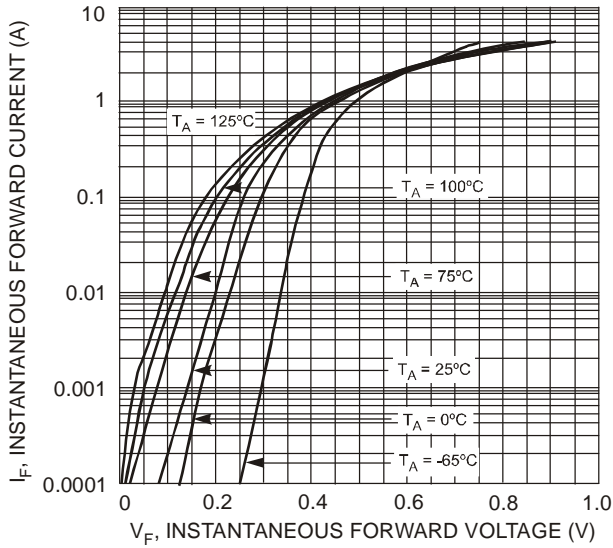


Fig. 1 Typical Forward Characteristics

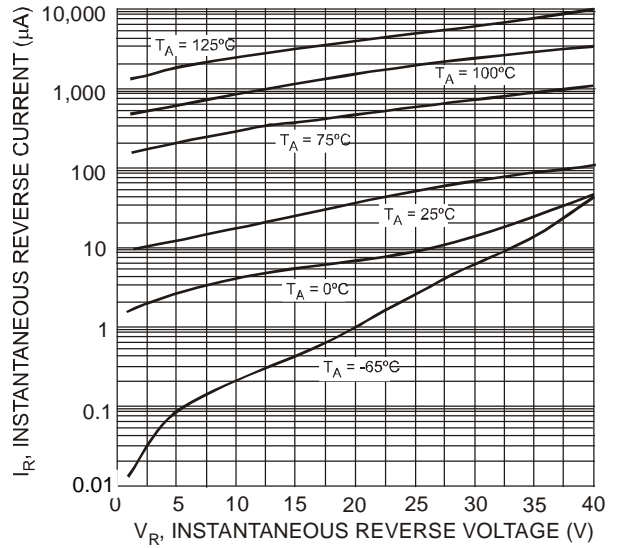


Fig. 2 Typical Reverse Characteristics

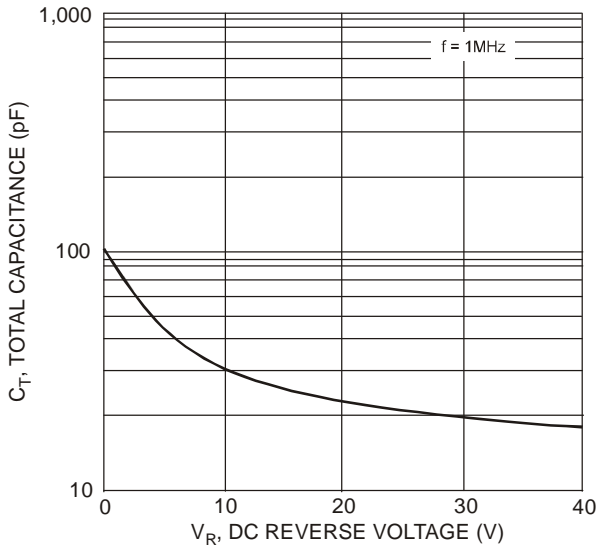


Fig. 3 Total Capacitance vs. Reverse Voltage

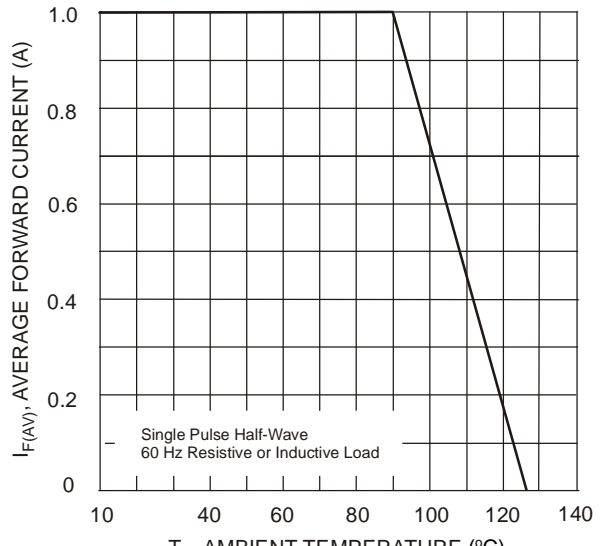


Fig. 4 Forward Current Derating Curve

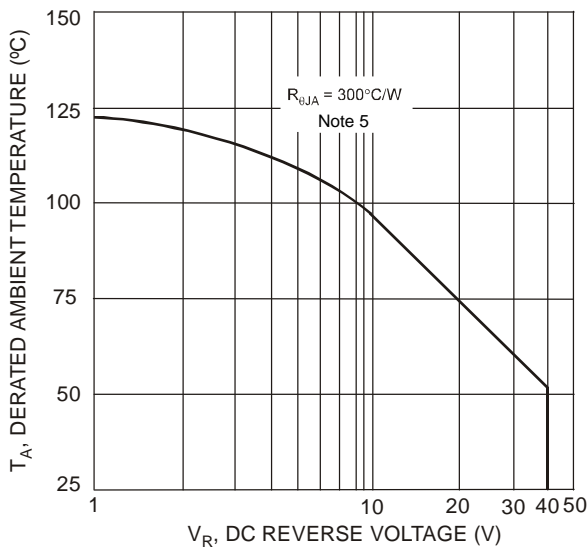


Fig. 5 Operating Temperature Derating

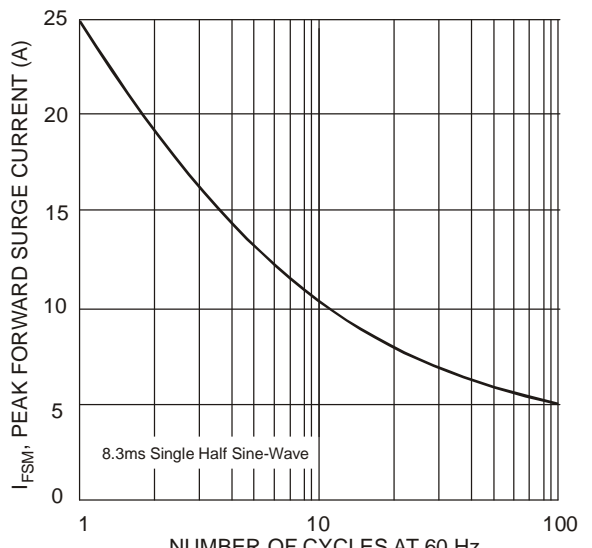
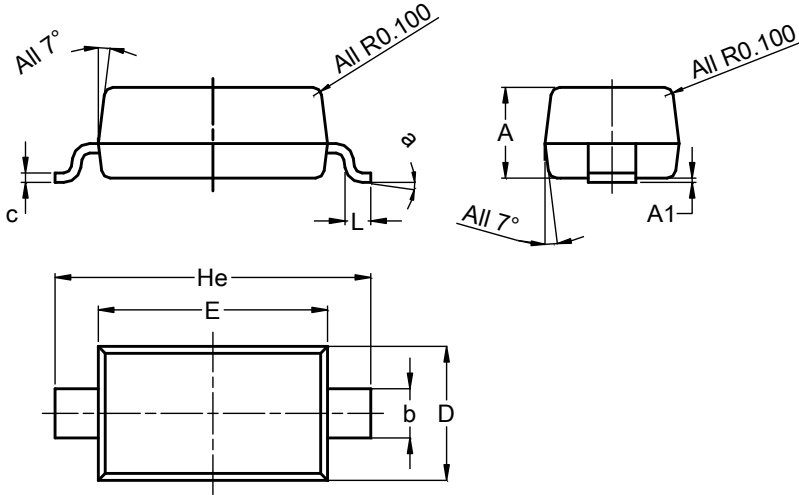


Fig. 6 Maximum Non-Repetitive Peak Forward Surge Current

Package Outline Dimensions

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

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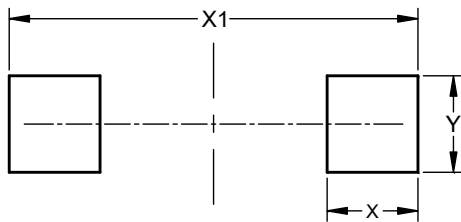


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Dim	Min	Max	Typ
A	1.00	1.35	1.05
A1	0.00	0.10	0.05
b	0.52	0.62	0.57
c	0.10	0.15	0.11
D	1.40	1.70	1.55
E	2.55	2.85	2.65
He	3.55	3.85	3.65
L	0.25	0.40	0.30
a	0°	8°	--
All Dimensions in mm			

Suggested Pad Layout

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

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Dimensions	Value (in mm)
X	0.900
X1	4.050
Y	0.950

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