

Maximum Ratings (@ $T_A = +25^\circ\text{C}$, 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	V_{RRM}	40	V
Working Peak Reverse Voltage	V_{RWM}		
DC Blocking Voltage	V_{RM}		
RMS Reverse Voltage	$V_{R(RMS)}$	28	V
Average Rectified Output Current $T_C = +65^\circ\text{C}$	I_O	1	A
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load	I_{FSM}	20	A

Thermal Characteristics

Characteristic	Symbol	Value	Unit
Maximum Thermal Resistance	$R_{\theta JA}$	473	$^\circ\text{C/W}$
Thermal Resistance Junction to Ambient (Note 5)	$R_{\theta JA}$	407	$^\circ\text{C/W}$
Thermal Resistance Junction to Ambient (Note 6)			
Operating and Storage Temperature Range	T_J, T_{STG}	-65 to +150	$^\circ\text{C}$

Electrical Characteristics (@ $T_A = +25^\circ\text{C}$, unless otherwise specified.)

Characteristic	Symbol	Min	Typ	Max	Unit	Test Condition
Reverse Breakdown Voltage (Note 7)	$V_{(BR)R}$	40	-	-	V	$I_R = 100\mu\text{A}$
Forward Voltage Drop	V_F	-	-	0.55	V	$I_F = 1\text{A}, T_J = +25^\circ\text{C}$
Leakage Current (Note 7)	I_R	-	10	100	μA	$V_R = 40\text{V}, T_J = +25^\circ\text{C}$
Junction Capacitance	C_J	-	55	-	pF	$V_R = 4.0\text{V}, f = 1\text{MHz}$

Notes: 5. FR-4 PCB, 2 oz. Copper, minimum recommended pad layout per <http://www.diodes.com/package-outlines.html>.
 6. Polyimide PCB, 2 oz. Copper, minimum recommended pad layout per <http://www.diodes.com/package-outlines.html>.
 7. Short duration pulse test used to minimize self-heating effect.

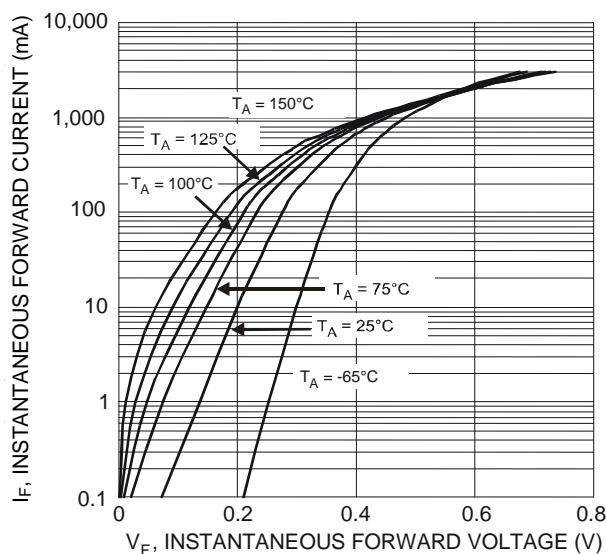


Fig. 1 Typical Forward Characteristics

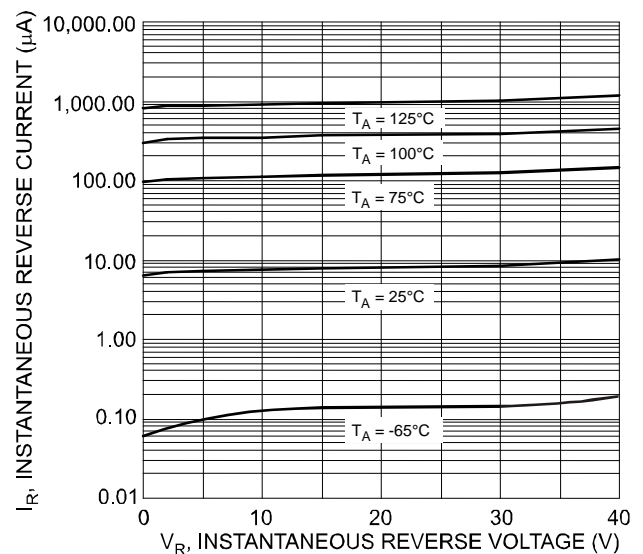


Fig. 2 Typical Reverse Characteristics

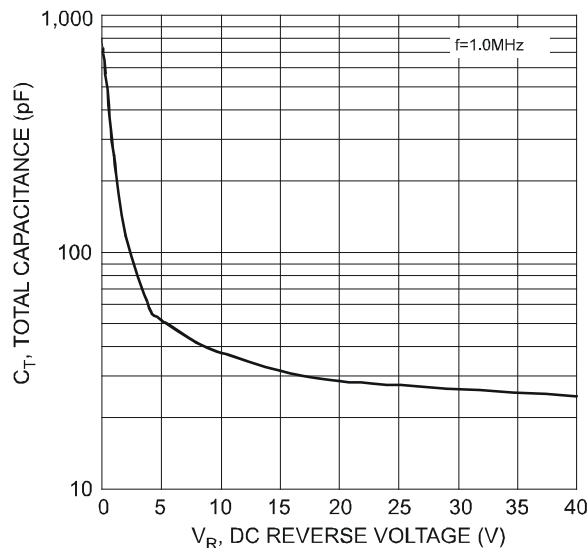


Fig. 3 Total Capacitance vs. Reverse Voltage

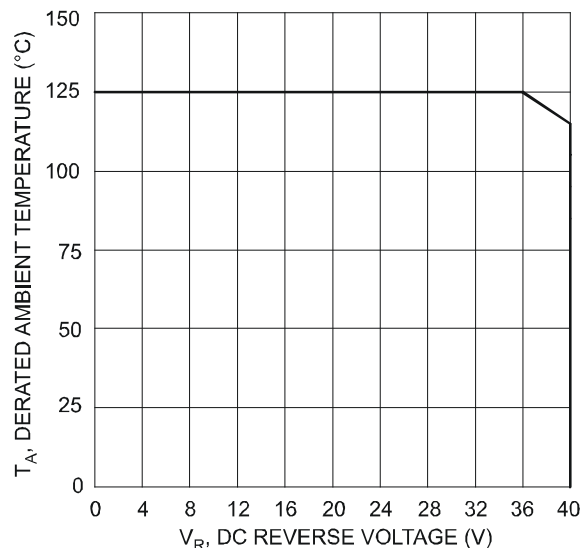
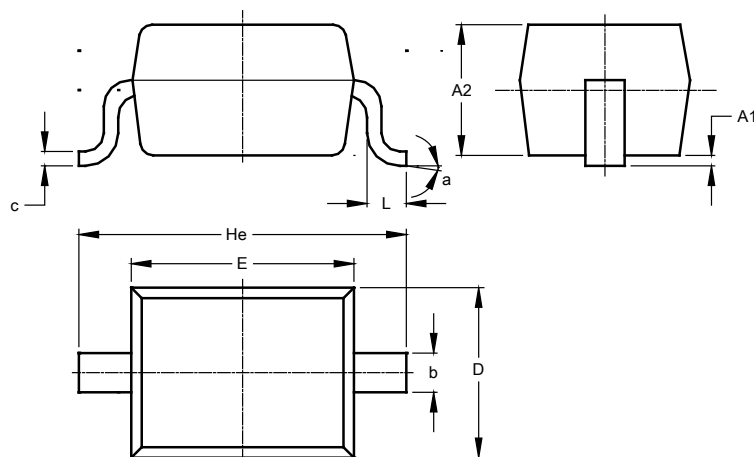


Fig. 4 Operating Temperature Derating

Package Outline Dimensions

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

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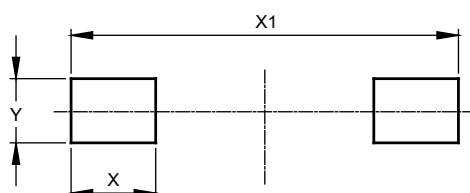


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Dim	Min	Max	Typ
A1	--	0.10	0.05
A2	1.00	1.10	1.05
b	0.25	0.35	0.30
c	0.10	0.15	0.11
D	1.20	1.40	1.30
E	1.60	1.80	1.70
He	2.30	2.70	2.50
L	0.20	0.40	0.30
a	0 $^{\circ}$	8 $^{\circ}$	--
All Dimensions in mm			

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	0.590
X1	2.700
Y	0.450

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