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

Single phase, half wave, 60Hz, resistive or inductive load.
For capacitance 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	20	V
RMS Reverse Voltage	$V_{R(RMS)}$	14	V
Average Rectified Output Current @ T_L = +90°C	I_O	0.5	A
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine Wave Superimposed on Rated Load	I_{FSM}	5.5	A

Thermal Characteristics

Characteristic	Symbol	Value	Unit
Power Dissipation (Note 6)	P_D	410	mW
Typical Thermal Resistance Junction to Ambient (Note 6)	$R_{\Theta JA}$	244	°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	Value	Unit	Test Conditions
Minimum Reverse Breakdown Voltage (Note 7)	$V_{(BR)R}$	20	V	I_R = 250µA
Maximum Forward Voltage Drop	V_{FM}	0.300 0.385 0.220 0.330	V	I_F = 0.1A, T_J = +25°C I_F = 0.5A, T_J = +25°C I_F = 0.1A, T_J = +100°C I_F = 0.5A, T_J = +100°C
Maximum Leakage Current (Note 8)	I_{RM}	75 250	µA	V_R = 10V, T_J = +25°C V_R = 20V, T_J = +25°C
	I_{RM}	5.0 8.0	mA	V_R = 10V, T_J = +100°C V_R = 20V, T_J = +100°C
Typical Total Capacitance	C_T	170	pF	V_R = 0V DC, f = 1MHz

Notes: 6. Device mounted on FR-4 PC board, 2"× 2", 2 oz. Copper, single sided, Cathode pad dimensions 0.75" × 1.0", Anode pad dimensions 0.25" × 1.0".
7. Pulse Test: Pulse width = 300µs, Duty Cycle ≤ 2%.
8. No purposefully added lead. Halogen and Antimony Free.

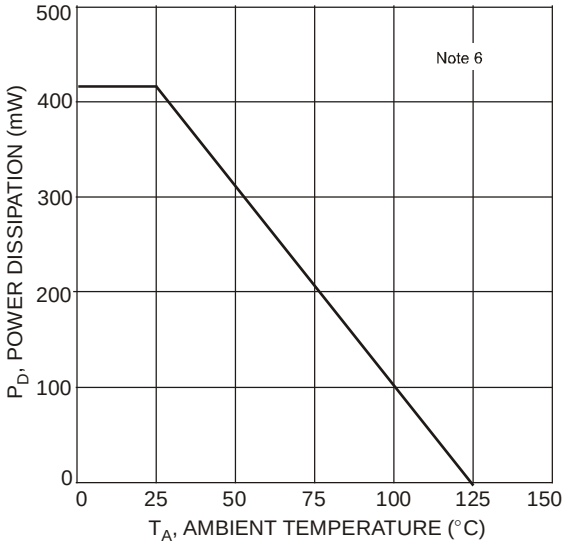


Fig. 1 Forward Power Dissipation

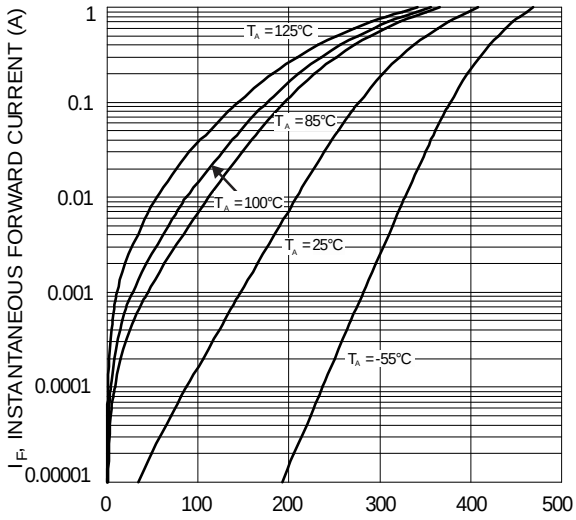


Figure 2 Typical Forward Characteristics

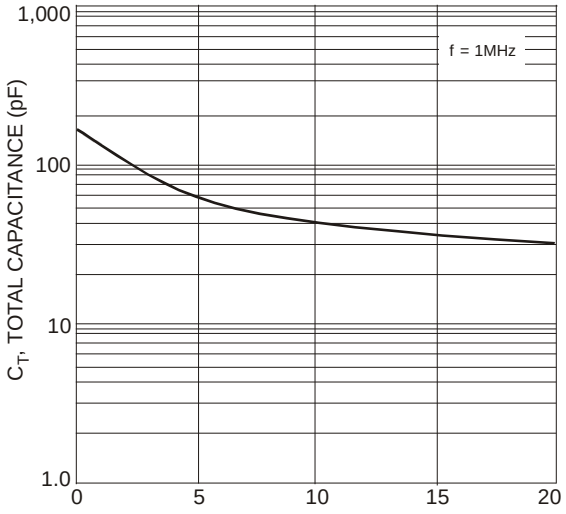


Fig. 3 Total Capacitance vs. Reverse Voltage

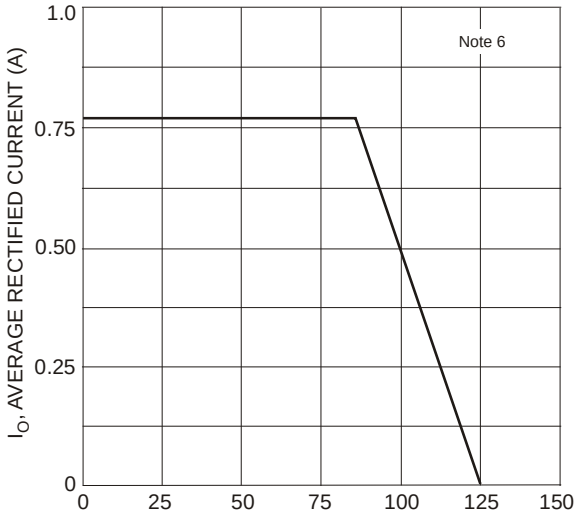
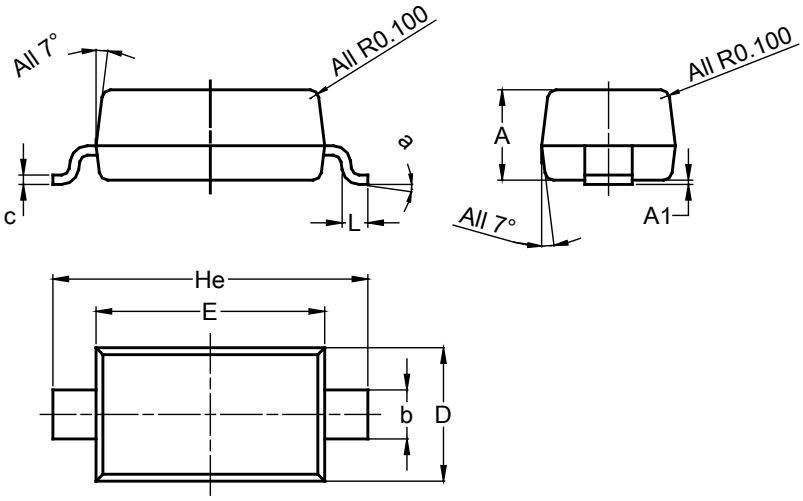


Fig. 4 Forward Current Derating Curve

Package Outline Dimensions

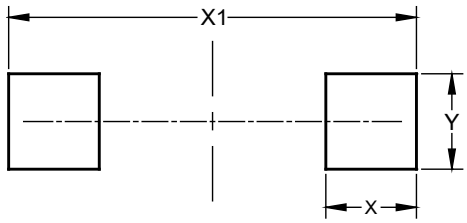
Please see http://www.diodes.com/package-outlines.html for the latest version.



SOD123			
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	0º	8º	--
All Dimensions in mm			

Suggested Pad Layout

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



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

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