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

Characteristic		Symbol	Value	Unit
Non-Repetitive Peak Reverse Voltage		V_{RM}	100	V
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage		V_{RRM} V_{RWM} V_R	80	V
RMS Reverse Voltage		$V_{R(RMS)}$	57	V
Forward Continuous Current (Note 6)		I_{FM}	500	mA
Average Rectified Output Current (Note 6)		I_O	250	mA
Non-Repetitive Peak Forward Surge Current	@ t = 1.0μs @ t = 1.0s	I_{FSM}	4.0 1.0	A

Thermal Characteristics

Characteristic	Symbol	Value	Unit
Power Dissipation (Note 6)	P_D	150	mW
Thermal Resistance Junction to Ambient (Note 6)	$R_{\theta JA}$	833	°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	Max	Unit	Test Condition
Reverse Breakdown Voltage (Note 7)	$V_{(BR)R}$	80	—	V	I_R = 2.5μA
Forward Voltage	V_F	0.62 — — —	0.72 0.855 1.0 1.25	V	I_F = 5.0mA I_F = 10mA I_F = 100mA I_F = 150mA
Leakage Current (Note 7)	I_R	—	100 50 30 25	nA μA μA nA	V_R = 70V V_R = 75V, T_J = +150°C V_R = 25V, T_J = +150°C V_R = 20V
Total Capacitance	C_T	—	3.5	pF	V_R = 6V, f = 1.0MHz
Reverse Recovery Time	t_{rr}	—	4.0	ns	I_F = I_R = 10mA, I_{rr} = 0.1 x I_R, R_L = 100Ω

Notes: 6. Device mounted on FR-4 PCB, 1-inch x 0.85 inch x 0.062 inch pad layout.
7. Short duration pulse test used to minimize self-heating effect.

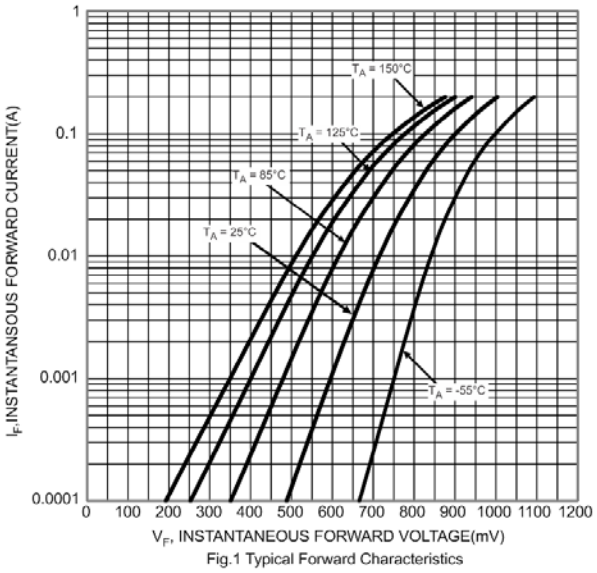


Fig.1 Typical Forward Characteristics

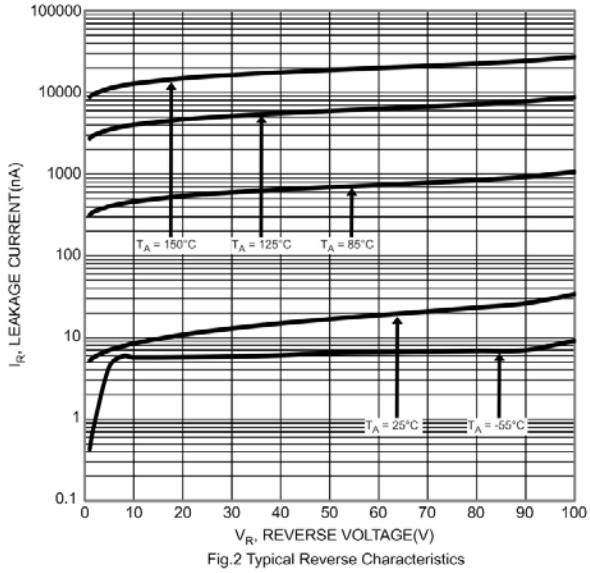


Fig.2 Typical Reverse Characteristics

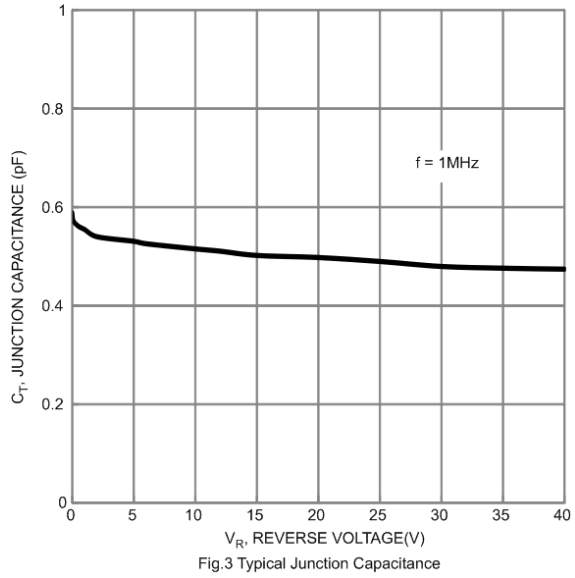


Fig.3 Typical Junction Capacitance

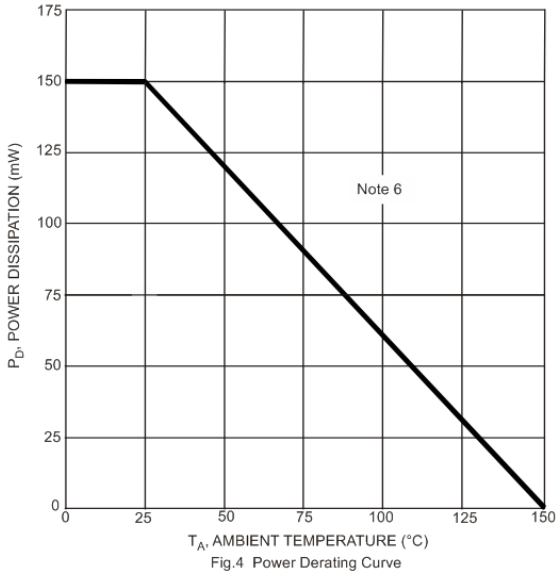
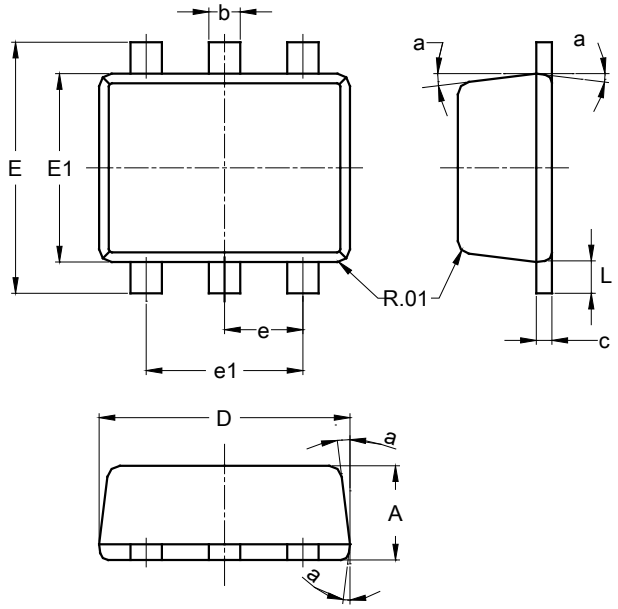


Fig.4 Power Derating Curve

Package Outline Dimensions

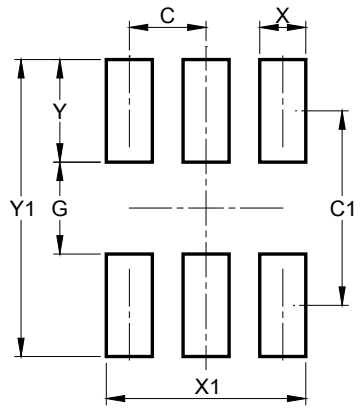
Please see http://www.diodes.com/package-outlines.html for the latest version.



SOT563			
Dim	**Min**	**Max**	**Typ**
A	0.55	0.60	0.60
b	0.15	0.30	0.20
c	0.10	0.18	0.11
D	1.50	1.70	1.60
E	1.55	1.70	1.60
E1	1.10	1.25	1.20
e	--	--	0.50
e1	0.90	1.10	1.00
L	0.10	0.30	0.20
a	8°	9°	7°
All Dimensions in mm			

Suggested Pad Layout

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



Dimensions	Value (in mm)
C	0.500
C1	1.270
G	0.600
X	0.300
X1	1.300
Y	0.670
Y1	1.940

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