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

Characteristic		Symbol	Value	Unit
Peak Pulse Power (tp = 8 x 20µs) (Note 5) (See Figure 6)		P_{pk}	85	W
Forward Voltage (Note 6) @ I_F = 10mA		V_F	0.9	V
Peak Pulse Current (tp = 8 x 20µs) (Note 5) (See Figure 6)		I_{pp}	4.5	A
ESD Rating	Human Body Model	V_{pp}	8	kV
	Machine Model		400	V
	IEC61000-4-2 Air Discharge		±25	kV
	IEC61000-4-2 Contact Discharge		±8	kV

Thermal Characteristics

Characteristic	Symbol	Value	Unit
Power Dissipation (Note 5)	P_D	250	mW
Thermal Resistance, Junction to Ambient Air (Note 5)	$R_{\theta JA}$	500	°C/W
Operating and Storage Temperature Range	T_J, T_{STG}	-65 to +150	°C

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

Characteristic		Symbol	Value	Unit
Reverse Standoff Voltage		V_{RWM}	5	V
Breakdown Voltage @ I_T = 5mA (Note 6)	Minimum	V_{BR}	6.4	V
	Maximum		7.2	
Maximum Reverse Leakage @ V_{RWM} (Note 6)		I_R	0.5	µA
@ V_R (Notes 6 & 7)			380	nA
Maximum Clamping Voltage @ I_{pp} = 4.5A (tp = 8x20µs) (See Figure 6)		V_C	19	V
Typical Total Capacitance (V_R = 0V, f = 1MHz)		C_T	65	pF

Notes: 5. Part mounted on FR-4 PC board with recommended pad layout, as per http://www.diodes.com.
6. Short duration pulse test used to minimize self-heating effect.
7. Guaranteed over the temperature range -40°C to +85°C and over the reverse voltage (V_R) range 2.0V to 2.6V.

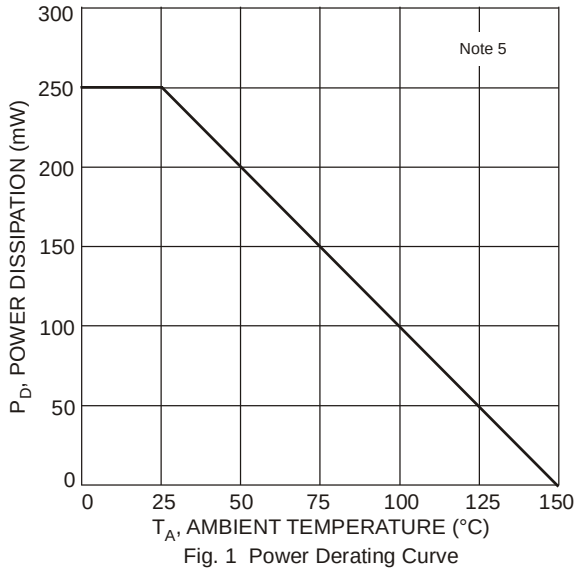


Fig. 1 Power Derating Curve

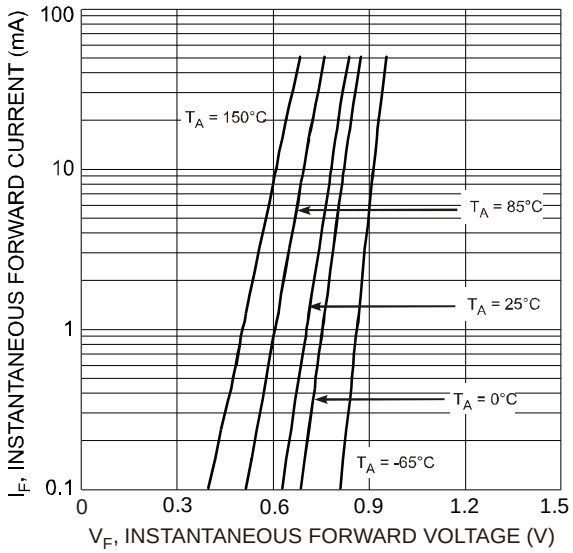


Fig. 2 Typical Forward Characteristics

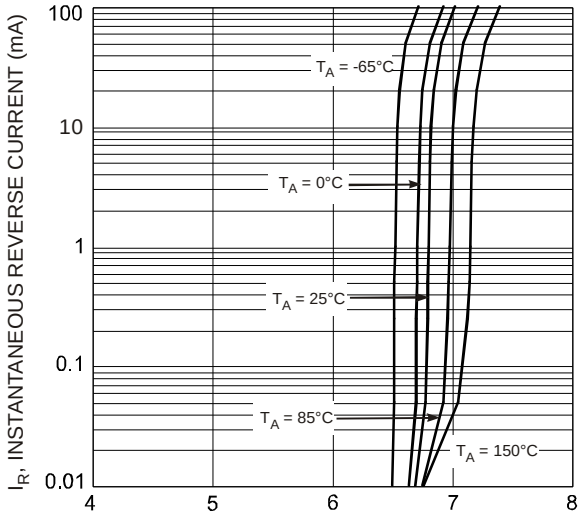


Fig. 3 Typical Breakdown Characteristics

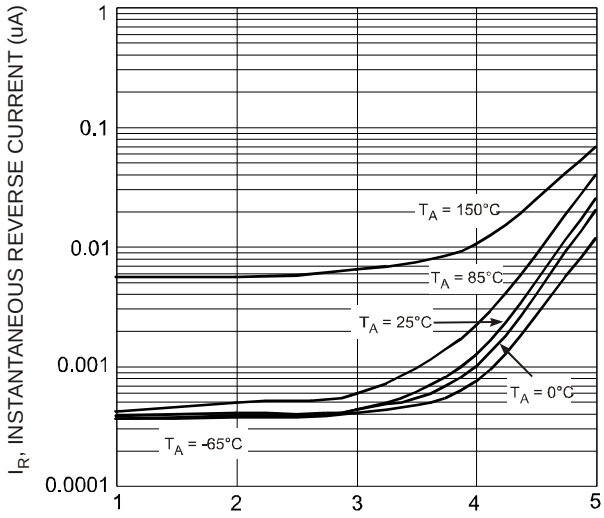


Fig. 4 Typical Low Current Reverse Characteristics

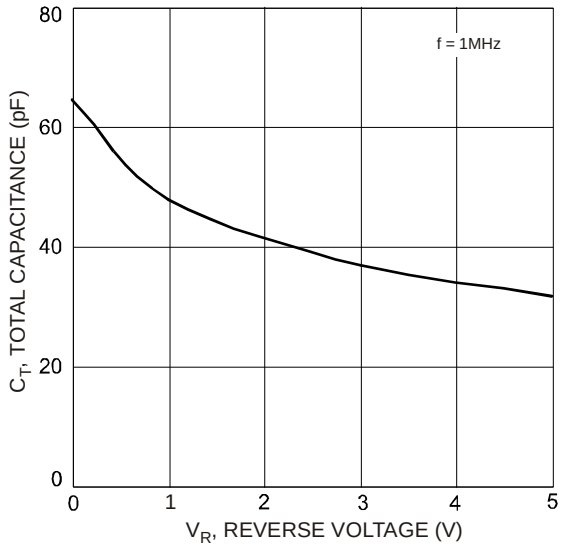


Fig. 5 Typical Total Capacitance vs. Reverse Voltage

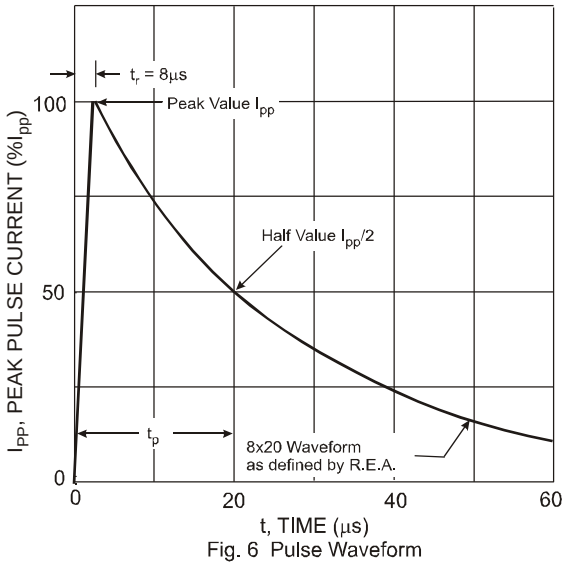
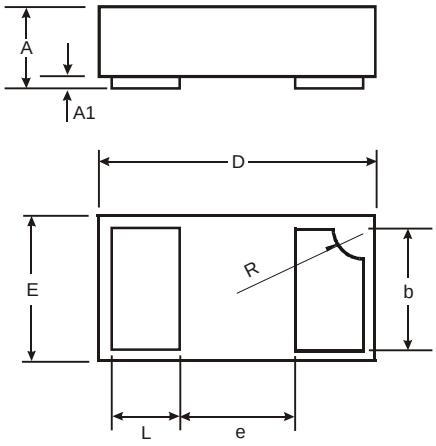


Fig. 6 Pulse Waveform

Package Outline Dimensions

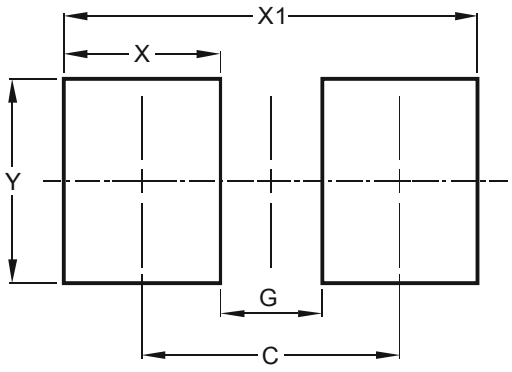
Please see AP02001 at http://www.diodes.com/datasheets/ap02001.pdf for the latest version.



X1-DFN1006-2			
Dim	**Min**	**Max**	**Typ**
A	0.47	0.53	0.50
A1	0	0.05	0.03
b	0.45	0.55	0.50
D	0.95	1.075	1.00
E	0.55	0.675	0.60
e	-	-	0.40
L	0.20	0.30	0.25
R	0.05	0.15	0.10
All Dimensions in mm			

Suggested Pad Layout

Please see AP02001 at http://www.diodes.com/datasheets/ap02001.pdf for the latest version.



Dimensions	Value (in mm)
C	0.70
G	0.30
X	0.40
X1	1.10
Y	0.70

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