

**Maximum Ratings** (@T<sub>A</sub> = +25°C, unless otherwise specified.)

Characteristic	Symbol	Value	Unit	Conditions
Peak Pulse Current	I <sub>PP</sub>	5	A	8/20μs, Per Figure 2
ESD Protection – Contact Discharge	V <sub>ESD, Contact</sub>	±8	kV	Standard IEC 61000-4-2
ESD Protection – Air Discharge	V <sub>ESD, Air</sub>	±15	kV	Standard IEC 61000-4-2

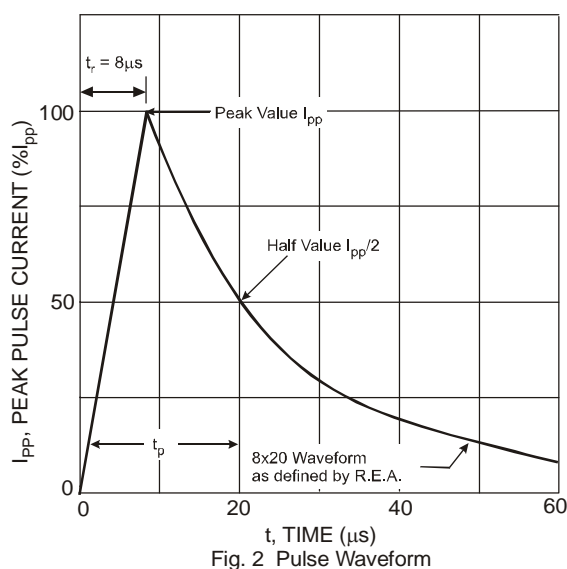
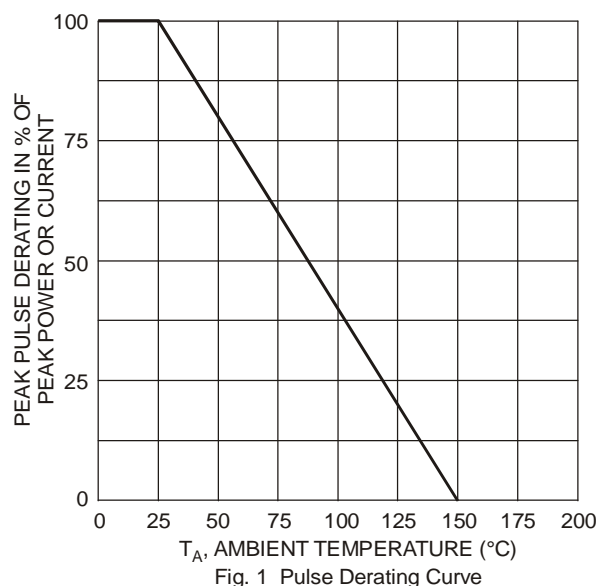
**Thermal Characteristics**

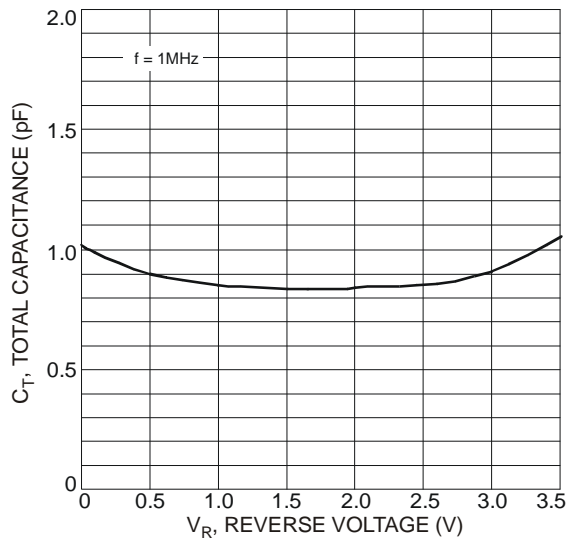
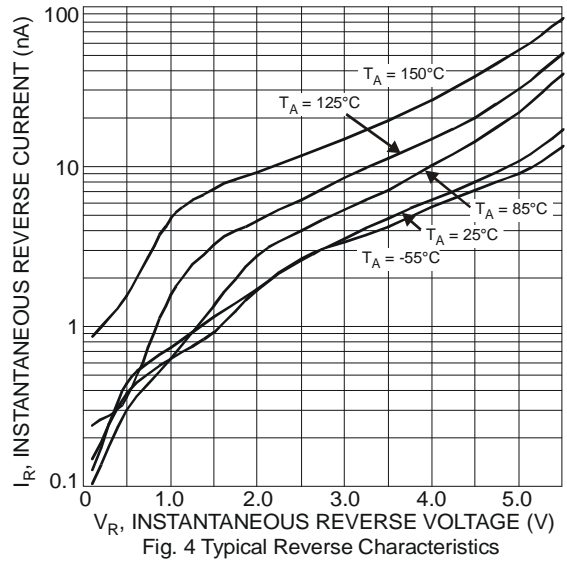
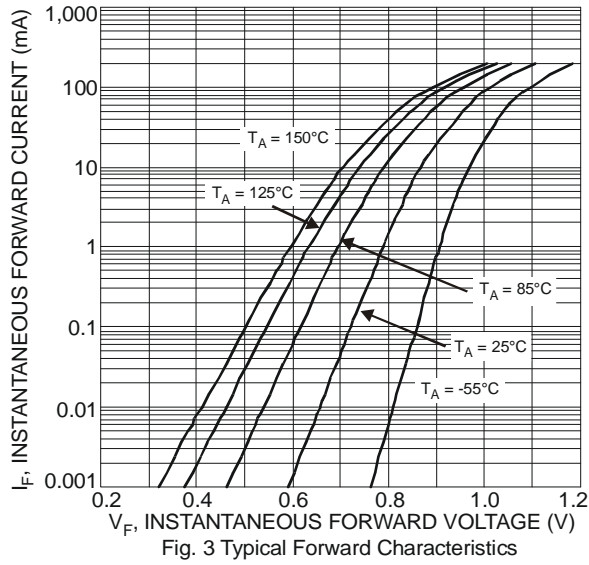
Characteristic	Symbol	Value	Unit
Package Power Dissipation (Note 5)	P <sub>D</sub>	250	mW
Thermal Resistance, Junction to Ambient (Note 5)	R <sub>θJA</sub>	500	°C/W
Operating and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	-65 to +150	°C

**Electrical Characteristics** (@T<sub>A</sub> = +25°C, unless otherwise specified.)

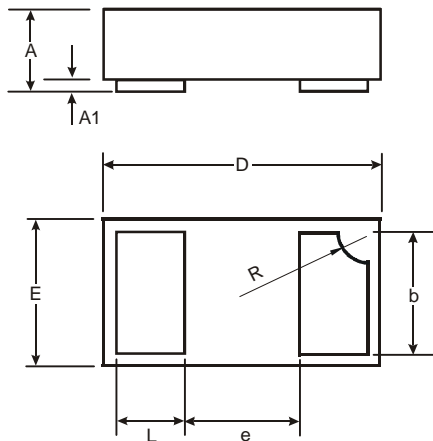
Characteristic	Symbol	Min	Typ	Max	Unit	Test Conditions
Reverse working voltage	V <sub>RWM</sub>	—	—	3.3	V	—
Reverse current (Note 6)	I <sub>R</sub>	—	0.1	1.0	μA	V <sub>R</sub> = V <sub>RWM</sub> = 3.3V
Reverse breakdown voltage	V <sub>BR</sub>	6.0	—	—	V	I <sub>R</sub> = 1mA
Forward voltage	V <sub>F</sub>	0.6	0.8	0.95	V	I <sub>F</sub> = 8mA
Reverse clamping voltage, Positive Transients	V <sub>CL1</sub>	—	10.0	—	V	I <sub>PP</sub> = 1A, t <sub>p</sub> = 8/20μs
Reverse clamping voltage, Negative Transients	V <sub>CL2</sub>	—	-1.7	—	V	I <sub>PP</sub> = -1A, t <sub>p</sub> = 8/20μs
Dynamic resistance	R <sub>DYN</sub>	—	0.9	—	Ω	I <sub>R</sub> = 1A, t <sub>p</sub> = 8/20μs
Capacitance	C <sub>T</sub>	—	0.85	1.2	pF	V <sub>R</sub> = 1.65V, f = 1MHz

Notes: 5. Device mounted on FR-4 PCB pad layout (2oz copper) as shown on Diodes, Inc. suggested pad layout AP02001, which can be found on our website at <http://www.diodes.com>.  
 6. Short duration pulse test used to minimize self-heating effect.



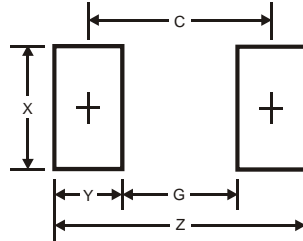


## Package Outline Dimensions



X2-DFN1006-2			
Dim	Min	Max	Typ
A	0.34	0.4	0.37
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



Dimensions	Value (in mm)
Z	1.1
G	0.3
X	0.7
Y	0.4
C	0.7

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