

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

Characteristic	Symbol	Value	Unit	Conditions
Peak Pulse Power Dissipation	P <sub>PP</sub>	1,300	W	8/20μs, Per Fig. 3
Peak Pulse Current	I <sub>PP</sub>	50	A	8/20μs, Per Fig. 3
ESD Protection – Contact Discharge	V <sub>ESD_Contact</sub>	±30	kV	Standard IEC 61000-4-2
ESD Protection – Air Discharge	V <sub>ESD_Air</sub>	±30	kV	Standard IEC 61000-4-2
ESD Protection – Human Body Model	V <sub>ESD_HBM</sub>	±16	kV	Standard IEC 61000-4-2

## Thermal Characteristics

Characteristic	Symbol	Value	Unit
Package Power Dissipation (Note 5)	P <sub>D</sub>	350	mW
Thermal Resistance, Junction to Ambient (Note 5)	R <sub>θJA</sub>	500	°C/W
Operating Temperature Range	T <sub>J</sub>	-55 to +125	°C
Storage Temperature Range	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>	—	—	14	V	—
Reverse Current (Note 6)	I <sub>R</sub>	—	10	100	nA	V <sub>R</sub> = V <sub>RWM</sub> = 14V
Reverse Breakdown Voltage	V <sub>BR</sub>	14.5	—	17.5	V	I <sub>R</sub> = 1mA
Reverse Clamping Voltage	V <sub>CL</sub>	—	—	18	V	I <sub>PP</sub> = 1A, t <sub>p</sub> = 8/20μs
		—	—	23		I <sub>PP</sub> = 30A, t <sub>p</sub> = 8/20μs
		—	—	26		I <sub>PP</sub> = 50A, t <sub>p</sub> = 8/20μs
Capacitance	C <sub>T</sub>	—	360	—	pF	V <sub>R</sub> = 0V, 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 at <http://www.diodes.com/datasheets/ap02001.pdf>.
  6. Short duration pulse test used to minimize self-heating effect.

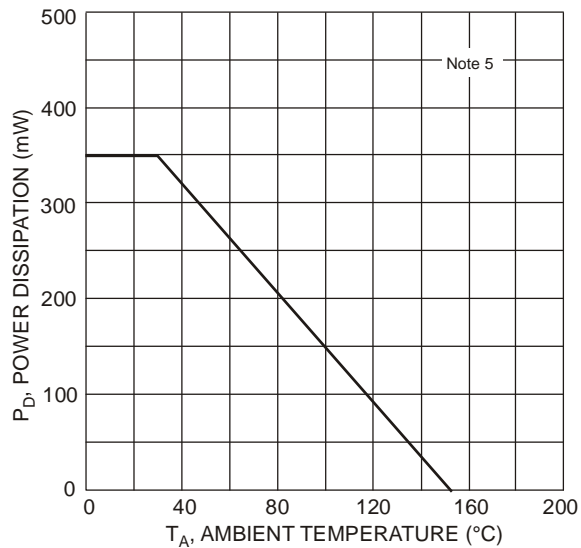


Figure 1 Power Derating Curve

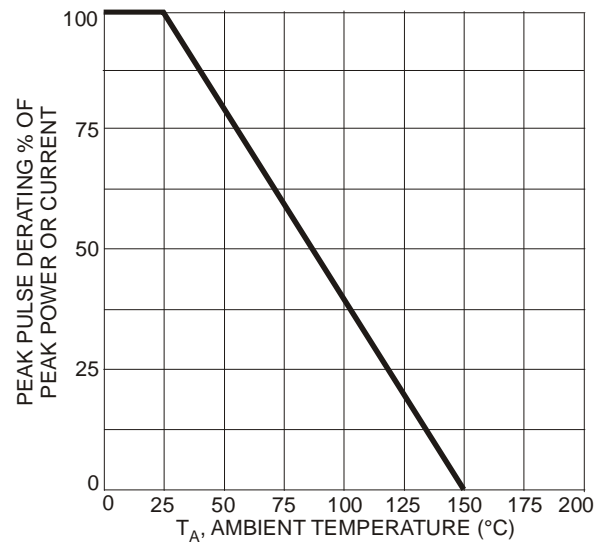


Figure 2 Pulse Derating Curve

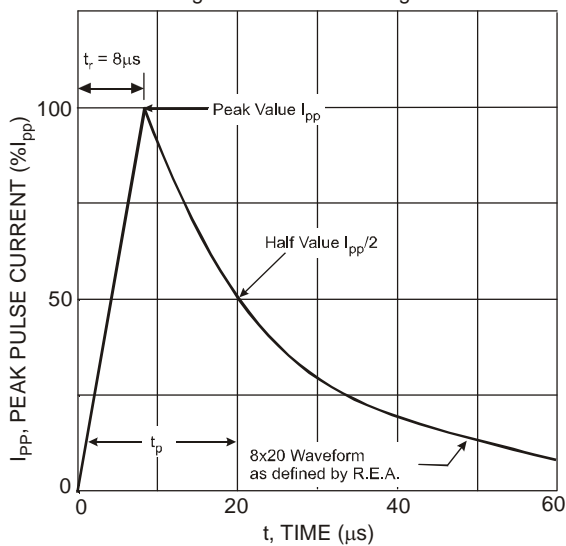


Figure 3 Typical 8 x 20µs Pulse Waveform

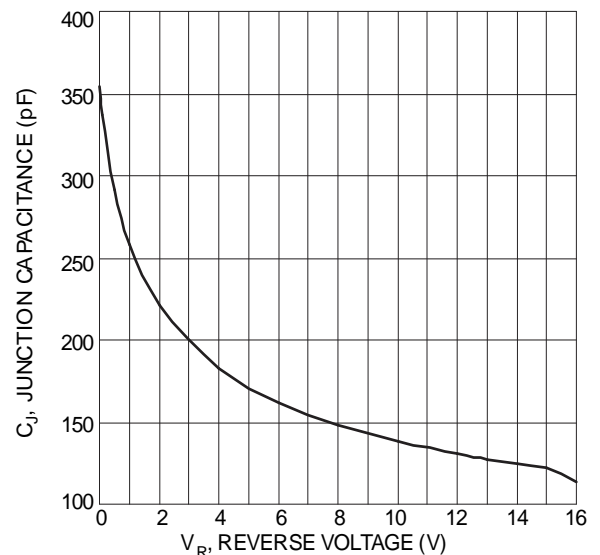
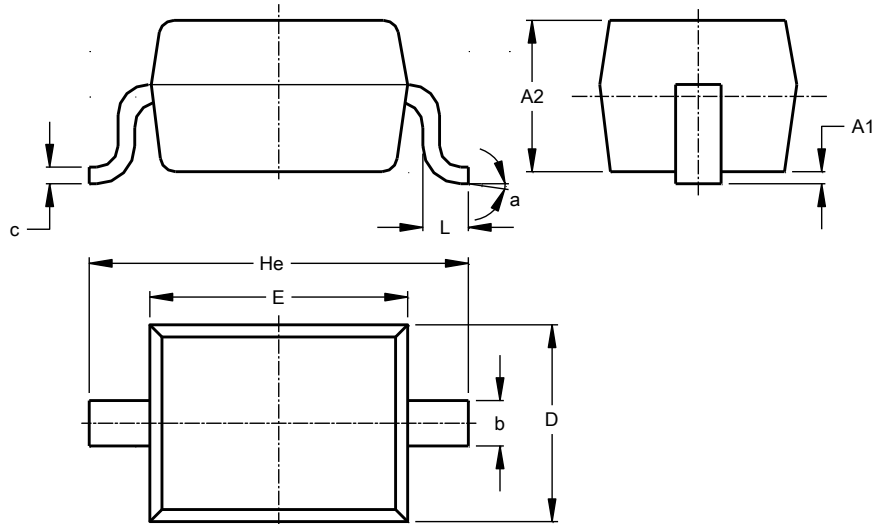


Figure 4 Typical Reverse Characteristics

## Package Outline Dimensions

Please see AP02002 at <http://www.diodes.com/datasheets/ap02002.pdf> for latest version.

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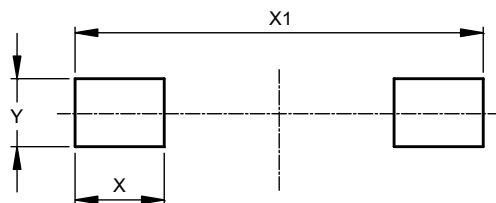


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Dim	Min	Max	Typ
A1	--	0.10	0.05
A2	1.00	1.10	1.05
b	0.25	0.35	0.30
c	0.10	0.15	0.11
D	1.20	1.40	1.30
E	1.60	1.80	1.70
He	2.30	2.70	2.50
L	0.20	0.40	0.30
a	0°	8°	—
All Dimensions in mm			

## Suggested Pad Layout

Please see AP02001 at <http://www.diodes.com/datasheets/ap02001.pdf> 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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