

Maximum Ratings (@ $T_A = +25^\circ\text{C}$, unless otherwise specified.)

Characteristic	Symbol	Value	Unit	Conditions
Peak Pulse Power Dissipation	P_{PP}	1000	W	8/20 μs , Per Figure 3
Peak Pulse Current	I_{PP}	30	A	8/20 μs , Per Figure 3
ESD Protection – Contact Discharge	$V_{ESD_Contact}$	± 30	kV	Standard IEC 61000-4-2
ESD Protection – Air Discharge	V_{ESD_Air}	± 30	kV	Standard IEC 61000-4-2

Thermal Characteristics

Characteristic	Symbol	Value	Unit
Package Power Dissipation (Note 5)	P_D	350	mW
Thermal Resistance, Junction to Ambient (Note 5)	$R_{\theta JA}$	500	$^\circ\text{C/W}$
Operating Temperature Range	T_J	-55 to +125	$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-65 to +150	$^\circ\text{C}$

Electrical Characteristics (@ $T_A = +25^\circ\text{C}$, unless otherwise specified.)

Characteristic	Symbol	Min	Typ	Max	Unit	Test Conditions
Reverse Working Voltage	V_{RWM}	—	—	22	V	—
Reverse Current (Note 6)	I_R	—	—	1	μA	$V_R = V_{RWM} = 22\text{V}$
Reverse Breakdown Voltage	V_{BR}	24	—	28	V	$I_R = 1\text{mA}$
Reverse Clamping Voltage	V_{CL}	—	—	30	V	$I_{PP} = 1\text{A}$, $t_P = 8/20\mu\text{s}$
		—	—	32		$I_{PP} = 5\text{A}$, $t_P = 8/20\mu\text{s}$
		—	—	37		$I_{PP} = 30\text{A}$, $t_P = 8/20\mu\text{s}$
Capacitance	C_T	—	220	—	pF	$V_R = 0\text{V}$, $f = 1\text{MHz}$

- 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.

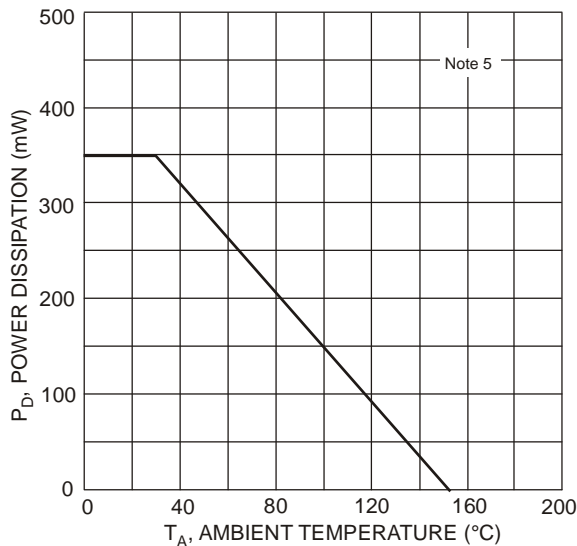


Figure 1 Power Derating Curve

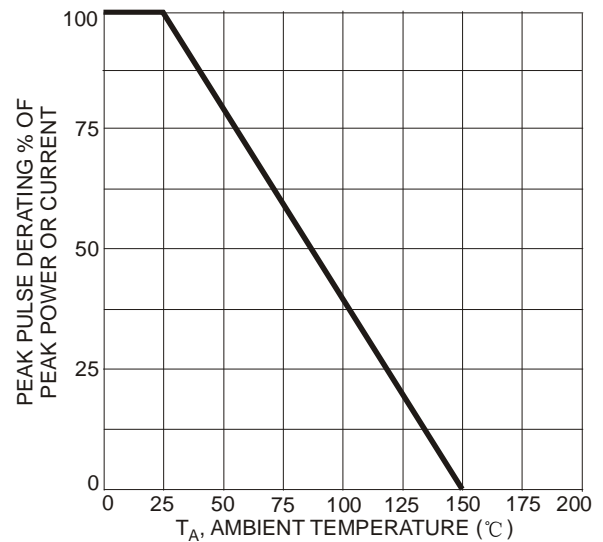


Figure 2 Pulse Derating Curve

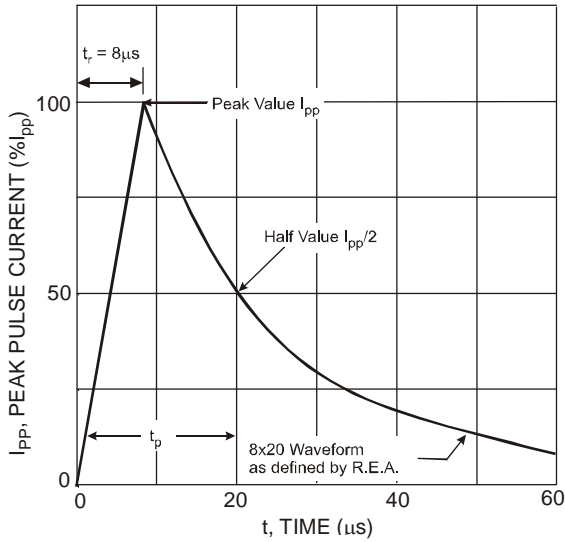


Figure 3 Typical 8 x 20µs Pulse Waveform

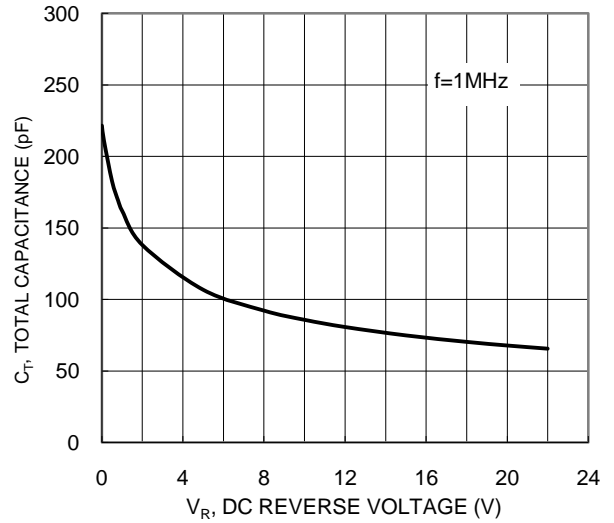
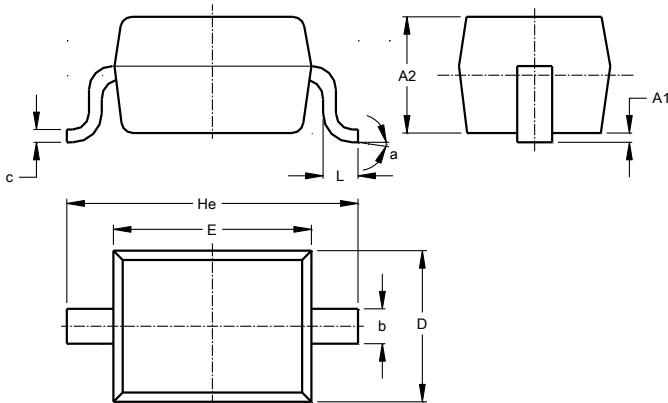


Figure 4 Total Capacitance vs. Reverse Voltage

Package Outline Dimensions

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

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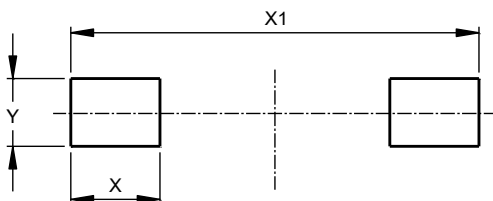


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Dim	Min	Max	Typ
A1	--	0.10	0.05
A2	1.00	1.10	1.05
b	0.25	0.35	0.30
c	0.10	0.15	0.11
D	1.20	1.40	1.30
E	1.60	1.80	1.70
He	2.30	2.70	2.50
L	0.20	0.40	0.30
a	0°	8°	--
All Dimensions in mm			

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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