

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

Characteristic	Symbol	Value	Unit	Conditions
Peak Pulse Power Dissipation	P _{PP}	600	W	8/20μs, Per Figure 3
Peak Pulse Current	I _{PP}	25	A	8/20μs, 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
ESD Protection – Human Body Model	V _{ESD_HBM}	±16	kV	Standard IEC 61000-4-2

Thermal Characteristics

Characteristic	Symbol	Value	Unit
Package Power Dissipation (Note 5)	P _D	200	mW
Thermal Resistance, Junction to Ambient (Note 5)	R _{θJA}	625	°C/W
Operating Temperature Range	T _J	-55 to +125	°C
Storage Temperature Range	T _{STG}	-65 to +150	°C

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

Characteristic	Symbol	Min	Typ	Max	Unit	Test Conditions
Reverse Working Voltage	V _{RWM}	—	—	14	V	—
Reverse Current (Note 6)	I _R	—	10	100	nA	V _R = V _{RWM} = 14V
Reverse Breakdown Voltage	V _{BR}	14.5	—	17.5	V	I _R = 1mA
Reverse Clamping Voltage	V _{CL}	—	—	20	V	I _{PP} = 5A, t _p = 8/20μs
		—	—	23		I _{PP} = 15A, t _p = 8/20μs
		—	—	25		I _{PP} = 25A, t _p = 8/20μs
Capacitance	C _T	—	160	—	pF	V _R = 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 on our website at <http://www.diodes.com>.
 6. Short duration pulse test used to minimize self-heating effect.

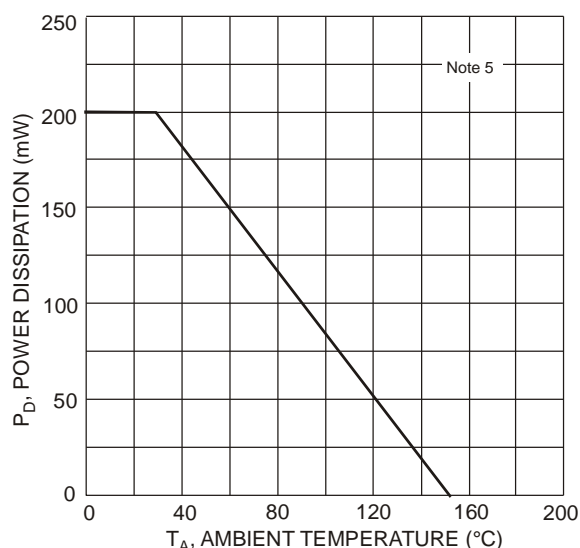


Figure 1 Power Derating Curve

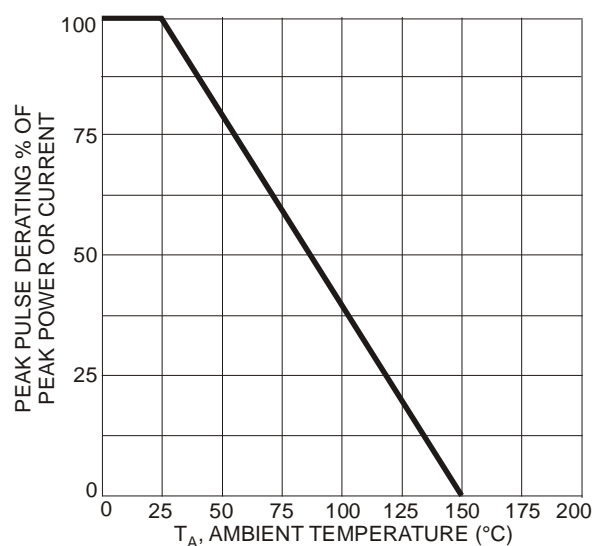


Figure 2 Pulse Derating Curve

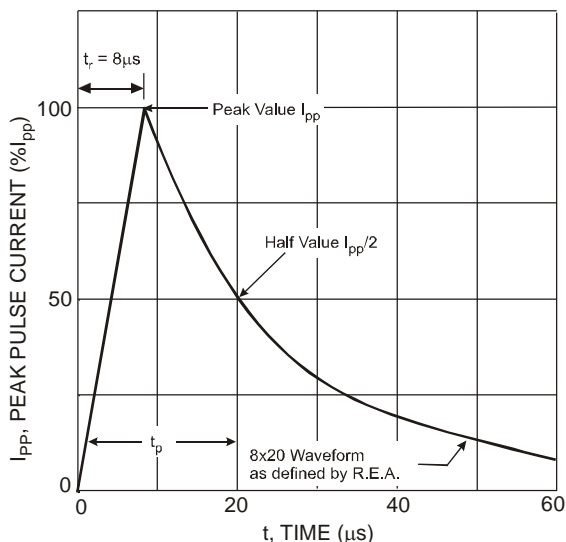


Figure 3 Typical 8 x 20µs Pulse Waveform

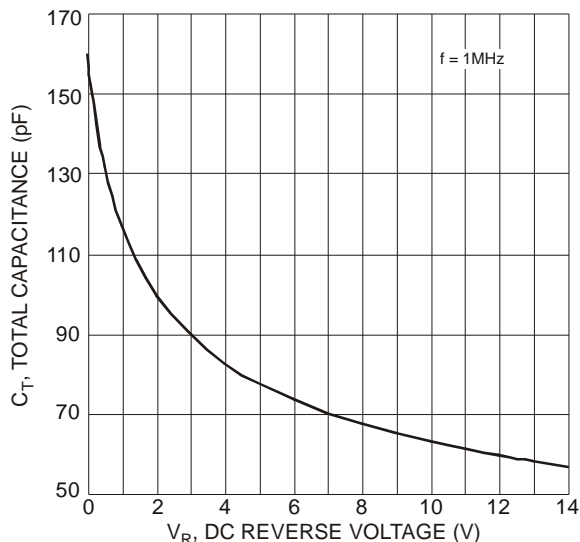


Figure 4 Typical Total Capacitance

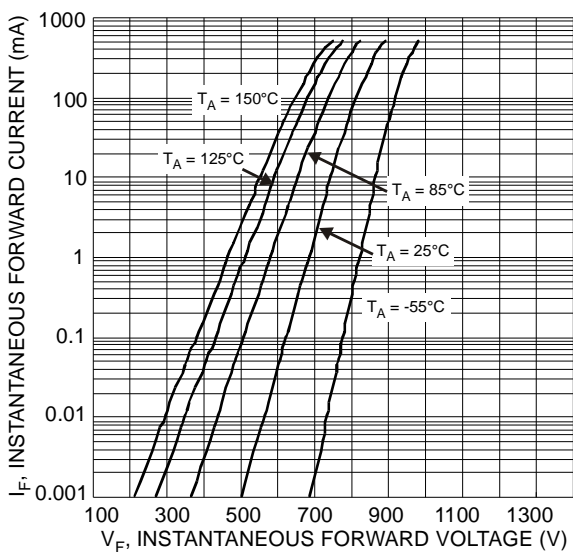


Figure 5 Typical Forward Characteristics

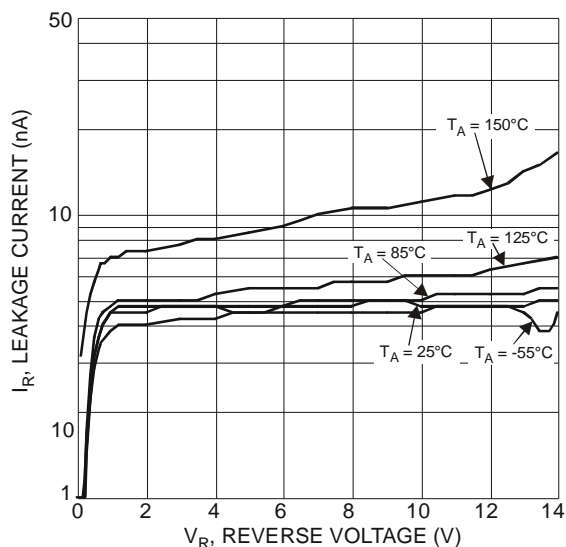
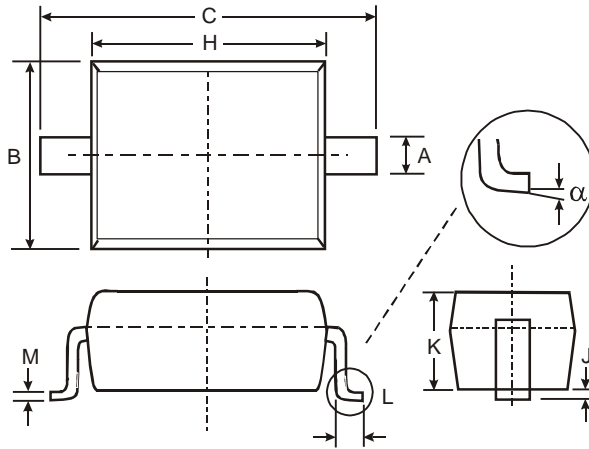


Figure 6 Typical Reverse Characteristics

Package Outline Dimensions

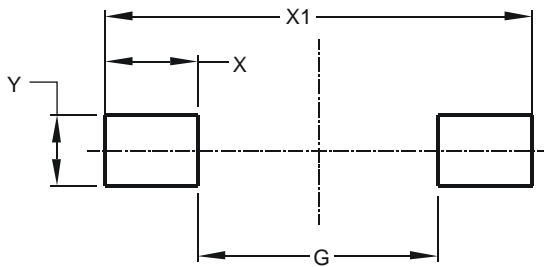
Please see AP02002 at <http://www.diodes.com/datasheets/ap02002.pdf> for latest version.



SOD323		
Dim	Min	Max
A	0.25	0.35
B	1.20	1.40
C	2.30	2.70
H	1.60	1.80
J	0.00	0.10
K	1.0	1.1
L	0.20	0.40
M	0.10	0.15
α	0°	8°
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)
G	1.520
X	0.590
X1	2.700
Y	0.450

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