

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

Characteristic	Symbol	Value	Unit	Conditions
Peak Pulse Current	I _{PP}	3	A	8/20μs, Per Figure 3
ESD Protection – Contact Discharge	V _{ESD_Contact}	±8	kV	Standard IEC 61000-4-2
ESD Protection – Air Discharge	V _{ESD_Air}	±15	kV	Standard IEC 61000-4-2

Thermal Characteristics

Characteristic	Symbol	Value	Unit
Power Dissipation (Note 5)	P _D	380	mW
Thermal Resistance, Junction to Ambient (Note 5)	R _{θJA}	327	°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	Min	Typ	Max	Unit	Test Conditions
Reverse Working Voltage	V _{RWM}	—	—	5.5	V	—
Reverse Current (Note 6)	I _R	—	—	200	nA	V _R = 5.5V
Reverse Breakdown Voltage	V _{BR}	6.0	—	—	V	I _R = 1mA
Reverse Clamping Voltage, Positive Transients (Note 7)	V _{CL}	—	10	12	V	I _{PP} = 1A, t _p = 8/20μs
Dynamic Resistance	R _{DYN}	—	1.0	—	Ω	I _R = 1A, t _p = 8/20μs
Capacitance (Note 8)	C _T	—	0.4	0.65	pF	V _R = 2.5V, f = 1MHz
		—	0.5	—	pF	V _R = 0V, f = 1MHz

- Notes:
- 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>.
 - Short duration pulse test used to minimize self-heating effect.
 - Clamping voltage value is based on an 8x20μs peak pulse current (I_{pp}) waveform.
 - Measured from any CH to GND.
 - For information on the impact of Diodes' USB 2.0 compatible ESD protectors on signal integrity including eye diagram plots, please refer to AN77 at the following URL: http://www.diodes.com/destools/appnote_dnote.html.

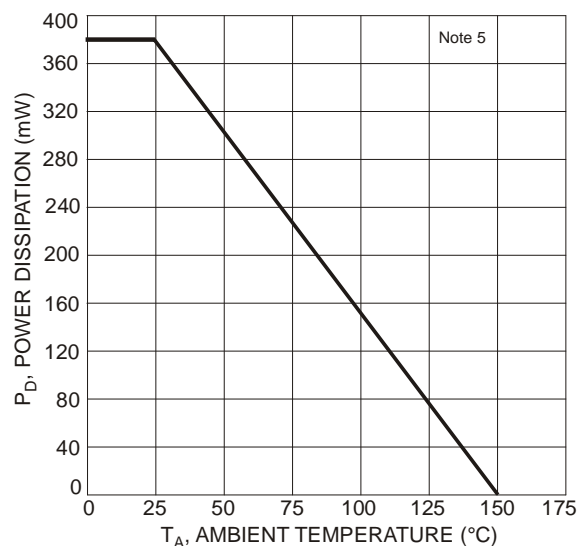


Figure 1 Power Derating Curve

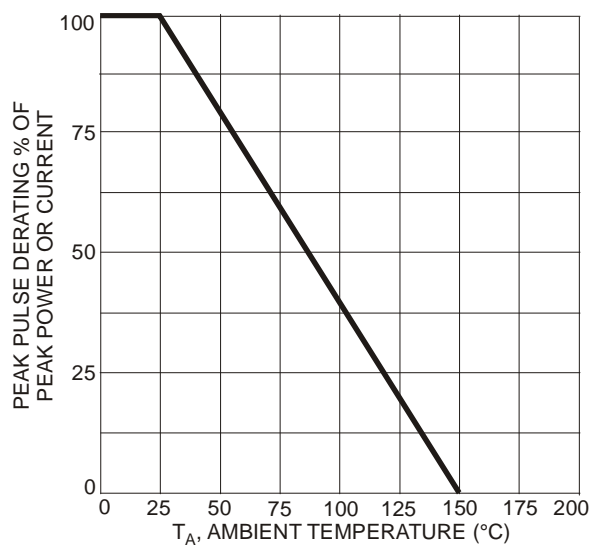
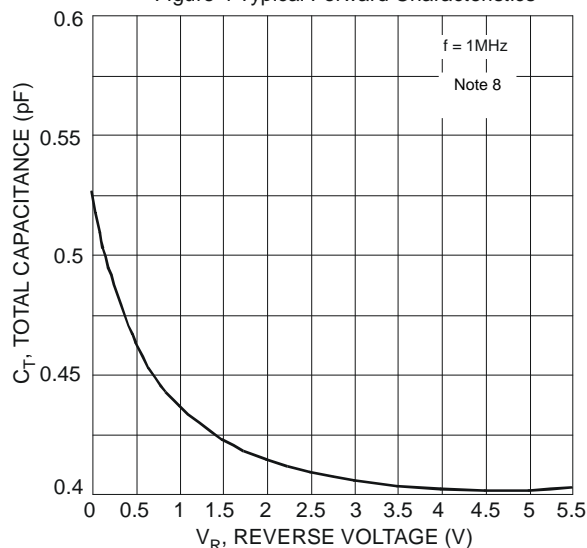
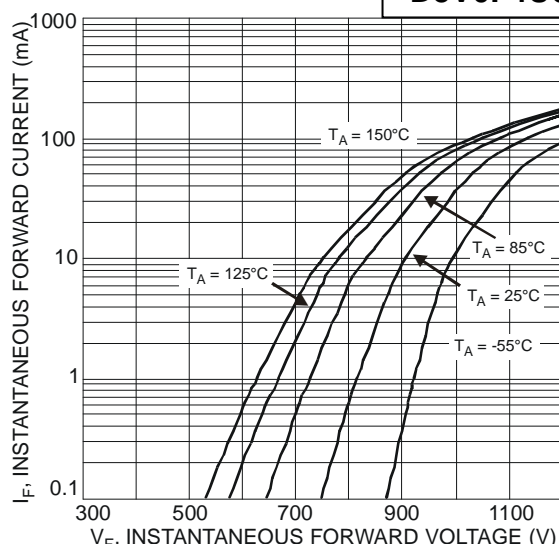
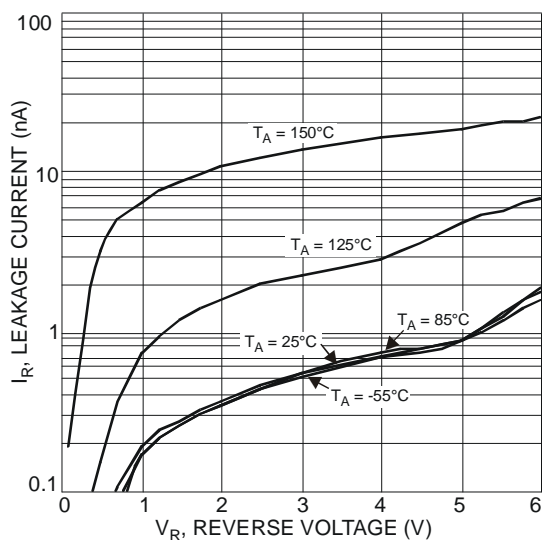
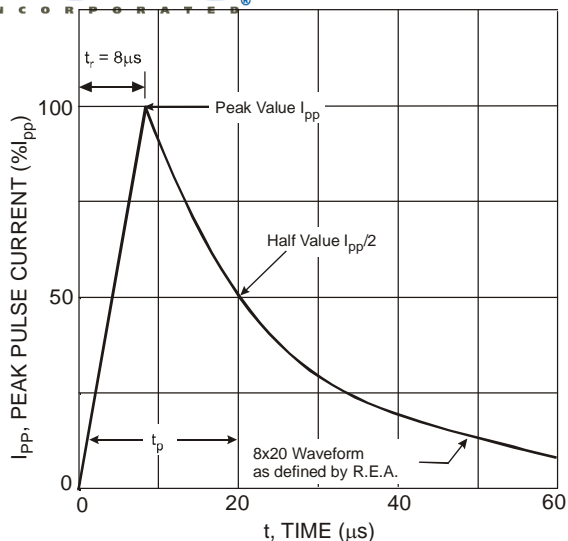
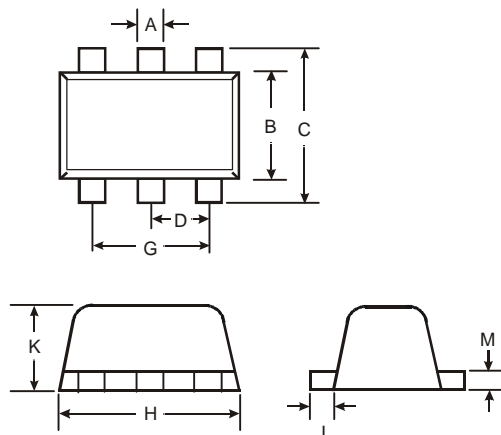


Figure 2 Pulse Derating Curve



Package Outline Dimensions

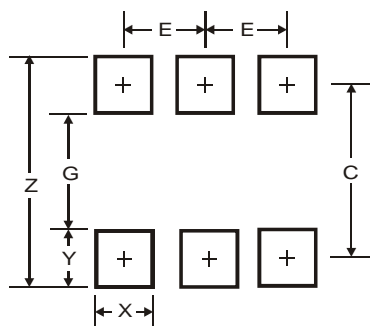
Please see AP02002 at <http://www.diodes.com/datasheets/ap02002.pdf> for the latest version.



SOT563			
Dim	Min	Max	Typ
A	0.15	0.30	0.20
B	1.10	1.25	1.20
C	1.55	1.70	1.60
D	-	-	0.50
G	0.90	1.10	1.00
H	1.50	1.70	1.60
K	0.55	0.60	0.60
L	0.10	0.30	0.20
M	0.10	0.18	0.11
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)
Z	2.2
G	1.2
X	0.375
Y	0.5
C	1.7
E	0.5

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