

APPLICATIONS

- ✓ USB Power & Data Line Protection
- ✓ RS-422 & RS-485 Network Protection
- ✓ Computer I/O Ports
- ✓ Audio/Video Inputs
- ✓ Microcontroller Interface Protection

IEC COMPATIBILITY (EN61000-4)

- ✓ 61000-4-2 (ESD): Air - 15kV, Contact - 8kV
- ✓ 61000-4-4 (EFT): 40A - 5/50ns
- ✓ 61000-4-5 (Surge): 24A, 8/20 μ s - Level 2(Line-Gnd) & Level 3(Line-Line)

FEATURES

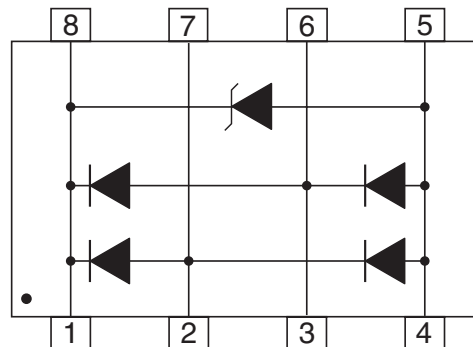
- ✓ 500 Watts Peak Pulse Power per Line (tp=8/20 μ s)
- ✓ ESD Protection > 40 kilovolts
- ✓ Protects Two (2) I/O Ports and Bus Lines
- ✓ Available in 2 Voltage Types 3.3V & 5V
- ✓ Low Capacitance: 15pF
- ✓ RoHS Compliant

MECHANICAL CHARACTERISTICS

- ✓ Molded JEDEC SO-8
- ✓ Weight 70 milligrams (Approximate)
- ✓ Available in Lead-Free Pure-Tin Plating(Annealed)
- ✓ Solder Reflow Temperature:
Pure-Tin - Sn, 100: 260-270°C
- ✓ Consult Factory for Leaded Device Availability
- ✓ Flammability Rating UL 94V-0
- ✓ 12mm Tape and Reel Per EIA Standard 481
- ✓ Marking: Marking Code, Logo, Date Code & Pin One Defined By Dot on Top of Package


SO-8

PIN CONFIGURATION



PUSB3B thru PUSB6B

DEVICE CHARACTERISTICS

MAXIMUM RATINGS @ 25°C Unless Otherwise Specified

PARAMETER	SYMBOL	VALUE	UNITS
Peak Pulse Power ($t_p = 8/20\mu s$) - See Figure 1	P_{PP}	500	Watts
Operating Temperature	T_L	-55 to 150	°C
Storage Temperature	T_{STG}	-55 to 150	°C

ELECTRICAL CHARACTERISTICS PER LINE @ 25°C Unless Otherwise Specified

PART NUMBER (See Note 1)	DEVICE MARKING CODE	RATED STAND-OFF VOLTAGE V_{WM} VOLTS	MINIMUM BREAKDOWN VOLTAGE @ 1mA $V_{(BR)}$ VOLTS	MAXIMUM CLAMPING VOLTAGE (See Fig. 2) @ $I_p = 1A$ V_C VOLTS	MAXIMUM CLAMPING VOLTAGE (See Fig. 2) @ 8/20 μs $V_C @ I_{PP}$	MAXIMUM LEAKAGE CURRENT @ V_{WM} I_D μA	MAXIMUM CAPACITANCE @ 0V, 1 MHz $C_{i(SD)}$ pF
PUSB3B	PRQ	3.3	4.0	6.0	12.9V @ 37A	125	15
PUSB6B	PRR	5.25	6.0	7.0	13.2V @ 35A	10	15

Note 1: Electrical specifications refer to pins 1 to pin 4 or pin 5 to pin 8.

GRAPHS

FIGURE 1
PEAK PULSE POWER VS PULSE TIME

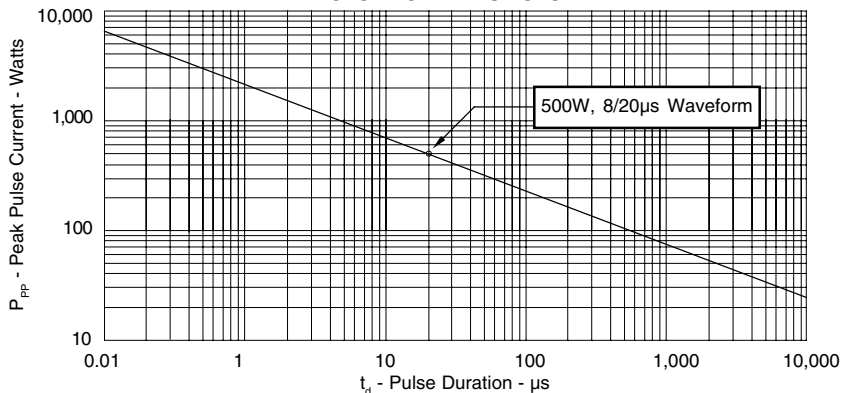


FIGURE 2
PULSE WAVE FORM

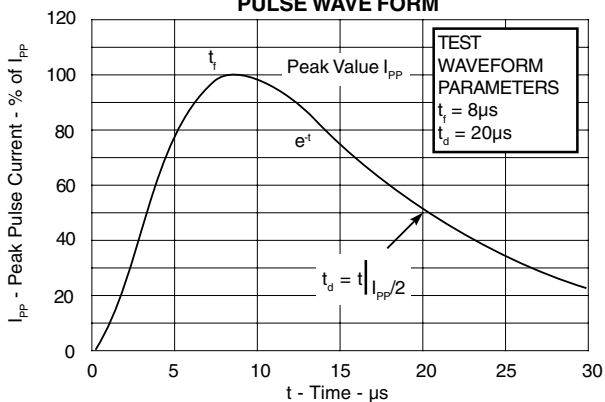
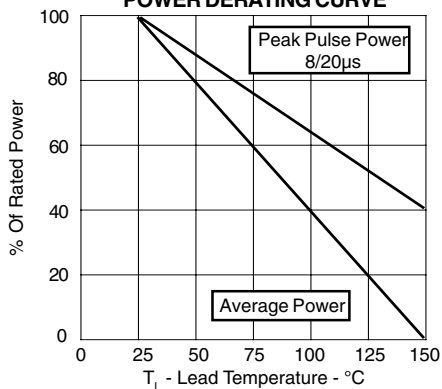
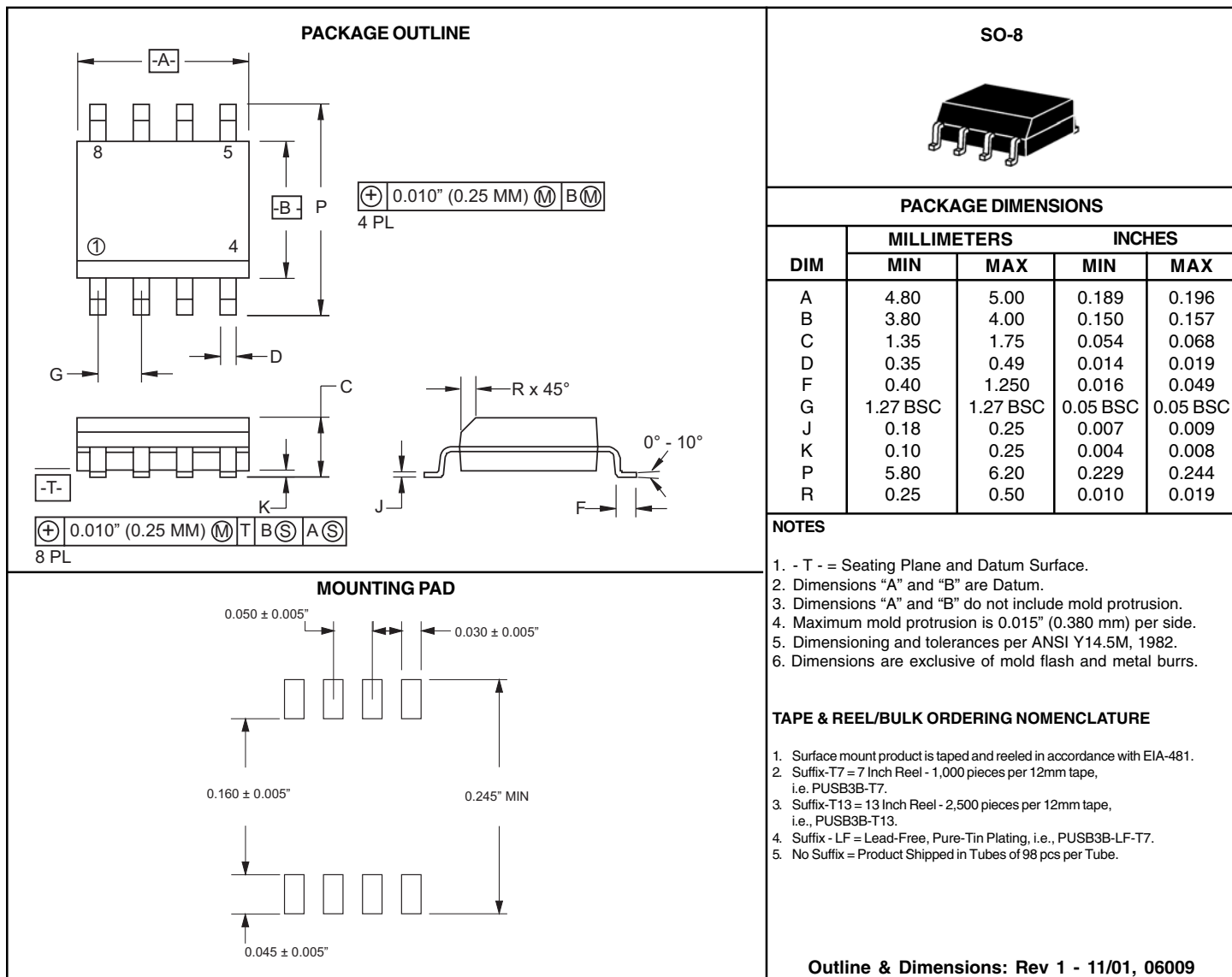


FIGURE 3
POWER DERATING CURVE



PUSB3B thru PUSB6B

SO-8 PACKAGE OUTLINE & DIMENSIONS



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