

STANDARD CAPACITANCE TVS ARRAY

APPLICATIONS

- ✓ RS-232, RS-422 & RS-423 Data Lines
- ✓ Microprocessor Based Equipment
- ✓ Control & Monitoring Systems
- ✓ Portable Electronics
- ✓ Sensor Electronics

IEC COMPATIBILITY (EN61000-4)

- ✓ 61000-4-2 (ESD): Air - 15kV, Contact - 8kV
- ✓ 61000-4-4 (EFT): 40A - 5/50ns
- ✓ 61000-4-5 (Surge): 12A, 8/20 μ s - Level 1(Line-Gnd) & Level 2(Line-Line)

FEATURES

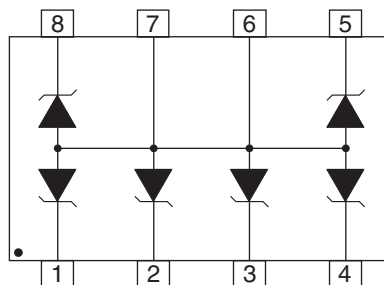
- ✓ 350 Watts Peak Pulse Power per Line ($t_p=8/20\mu$ s)
- ✓ Protects 6 Unidirectional Lines: Pins 1, 2, 3, 4, 5, 8 to Data Lines, Pins 6 & 7 to Ground
- ✓ Protects 5 Bidirectional Lines: Pins 1, 2, 3, 4, 5 or 8 for Data Lines, Pins 5 or 8 to Ground, Pins 6 & 7 Open
- ✓ ESD Protection > 25 kilovolts
- ✓ Protects 5.0 Volt Components
- ✓ Monolithic Design
- ✓ 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



PIN CONFIGURATION



PSMDA05-6

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}	350	Watts
Operating Temperature	T_L	-55 to 150	°C
Storage Temperature	T_{STG}	-55 to 150	°C

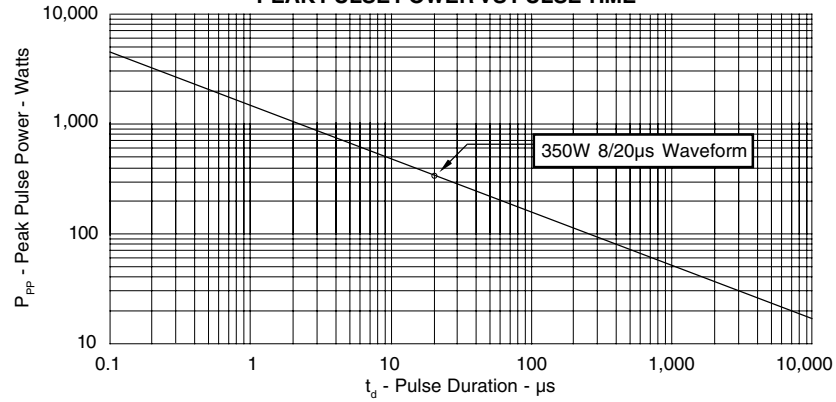
ELECTRICAL CHARACTERISTICS PER LINE @ 25°C Unless Otherwise Specified							
PART NUMBER (See Notes 1-2)	DEVICE MARKING CODE	RATED STAND-OFF VOLTAGE V_{WM} VOLTS	MINIMUM BREAKDOWN VOLTAGE @ 1mA $V_{(BR)}$ VOLTS	MAXIMUM CLAMPING VOLTAGE (See Fig. 2) @ $I_P = 1A$ V_C VOLTS	MAXIMUM CLAMPING VOLTAGE (See Fig. 2) @ 8/20 μs $V_C @ I_{PP}$	MAXIMUM LEAKAGE CURRENT @ V_{WM} I_D μA	MAXIMUM CAPACITANCE @ 0V, 1 MHz C_J pF
PSMDA05-6	QEB	5.0	6.0	9.8	18V @ 17A	20	120

Note 1: Test from individual pins 1, 2, 3, 4, 5 and 8 to ground pins 6 and 7 (Unidirectional Only).

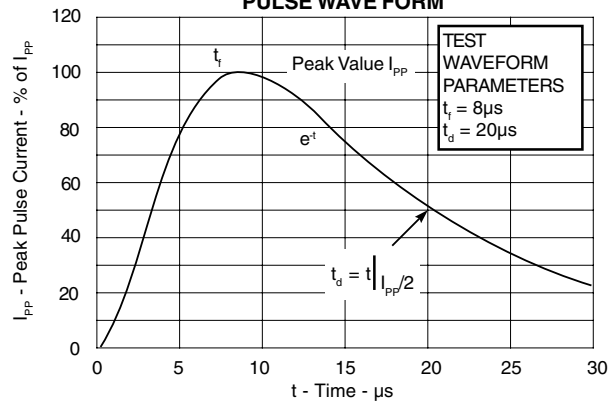
Note 2: Pins 6 & 7 not connected for Bidirectional use.

GRAPHS

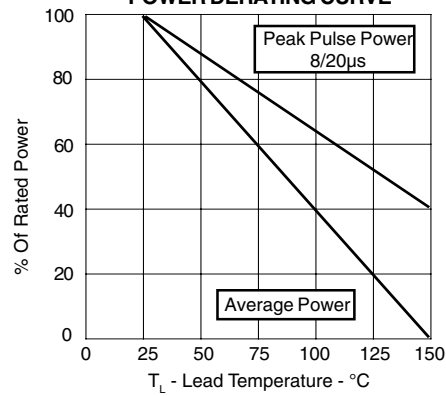
**FIGURE 1
PEAK PULSE POWER VS PULSE TIME**



**FIGURE 2
PULSE WAVE FORM**

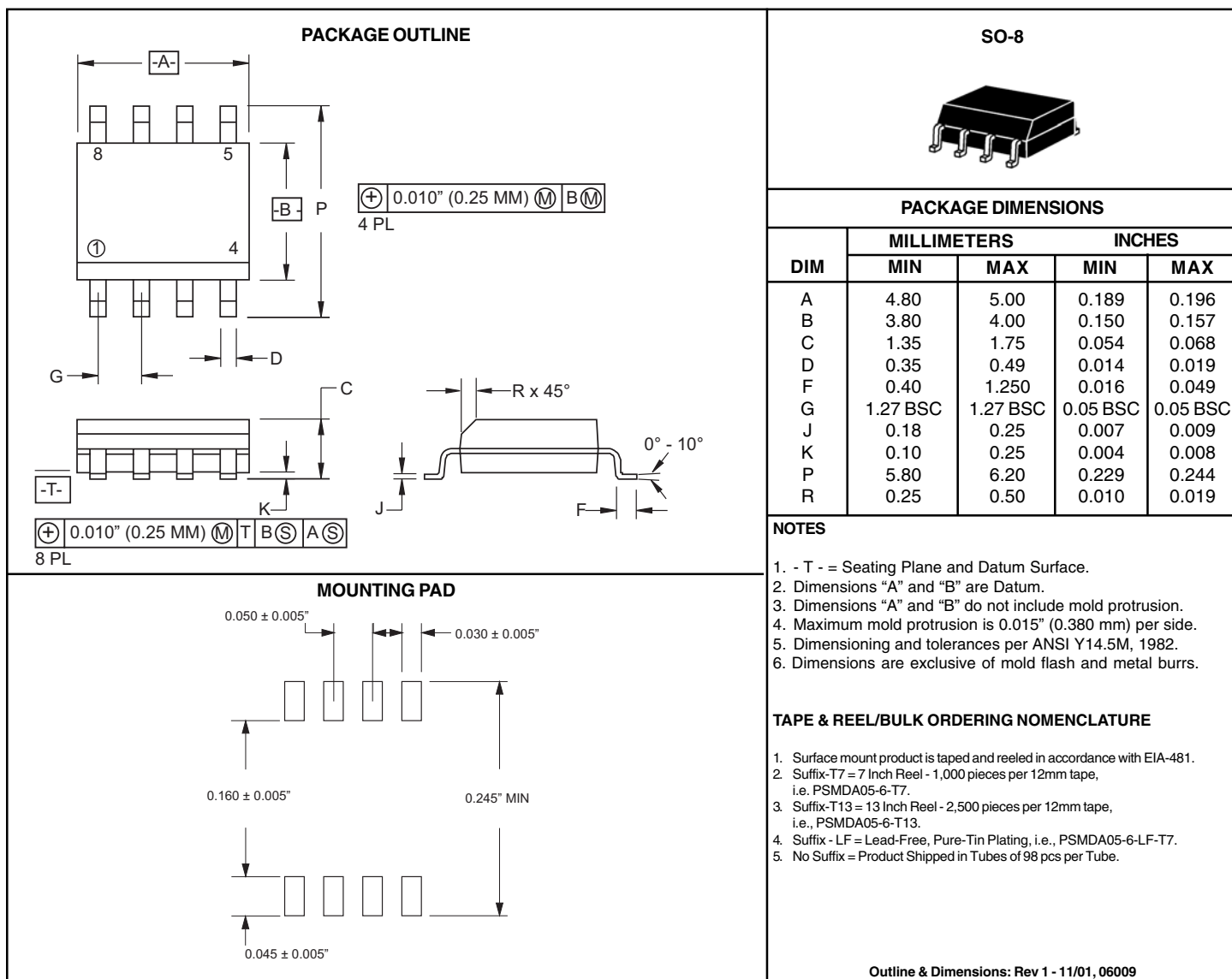


**FIGURE 3
POWER DERATING CURVE**



PSMDA05-6

SO-8 PACKAGE OUTLINE & DIMENSIONS



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