



PSMDA05C-4 thru PSMDA24C-4

STANDARD CAPACITANCE TVS ARRAY

APPLICATIONS

- ✓ RS-232 & RS-423 Data Lines
- ✓ Cellular Phones
- ✓ Audio/Video Inputs
- ✓ Portable Electronics
- ✓ Wireless Network Systems

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

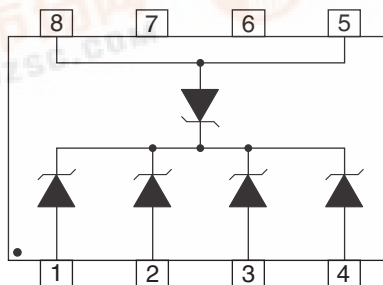
- ✓ 500 Watts Peak Pulse Power per Line ($t_p=8/20\mu$ s)
- ✓ Bidirectional Configurations
- ✓ Monolithic Design
- ✓ Available in Voltage Types Ranging From: 5V to 24V
- ✓ Protects Up to Four (4) Lines
- ✓ ESD Protection > 40 kilovolts

MECHANICAL CHARACTERISTICS

- ✓ Molded JEDEC SO-8 Package
- ✓ Weight 15 milligrams (Approximate)
- ✓ Flammability rating UL 94V-0
- ✓ 12mm Tape and Reel Per EIA Standard 481
- ✓ Marking: Logo, Marking Code, Date Code & Pin One Defined By Dot on Top of Package



PIN CONFIGURATION



PSMDA05C-4 thru PSMDA24C-4

DEVICE CHARACTERISTICS

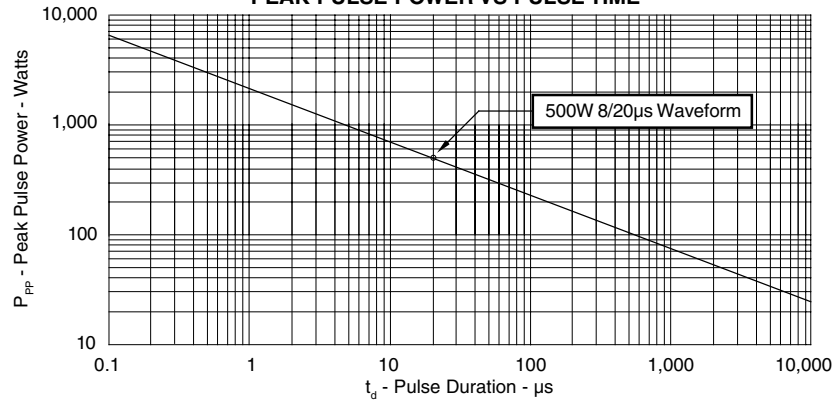
MAXIMUM RATINGS @ 25°C Unless Otherwise Specified			
PARAMETER	SYMBOL	VALUE	UNITS
Peak Pulse Power ($t_p = 8/20\mu s$) - See Figure 1	P_{PP}	500	Watts
Operating Temperature	T_J	-55°C to 150°C	°C
Storage Temperature	T_{STG}	-55°C to 150°C	°C

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 PER LINE @ 0V, 1 MHz C pF
PSMDA05C-4	TEB	5.0	6.0	9.8	19V @ 30A	100	350
PSMDA12C-4	TED	12.0	13.3	19.0	29V @ 20A	1	150
PSMDA15C-4	TEF	15.0	16.7	24.0	32V @ 18A	1	120
PSMDA24C-4	TEH	24.0	26.7	43.0	45V @ 13A	1	100

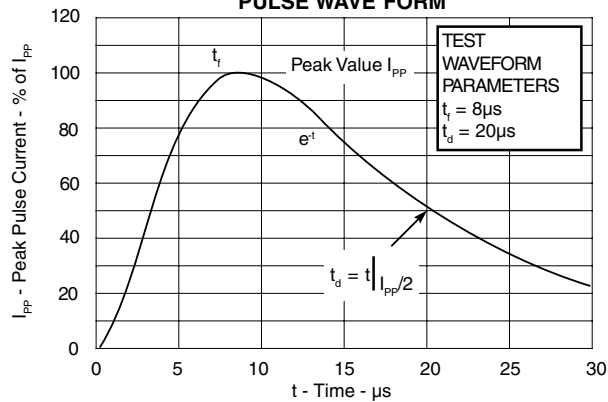
Note 1: Test individual pins 8 or 5 to pins 1, 2, 3, or 4. Pins 6 and 7 are open.

GRAPHS

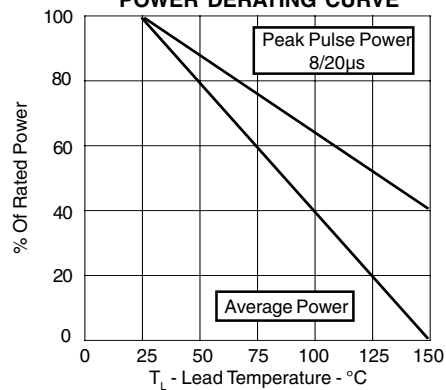
**FIGURE 1
PEAK PULSE POWER VS PULSE TIME**



**FIGURE 2
PULSE WAVE FORM**

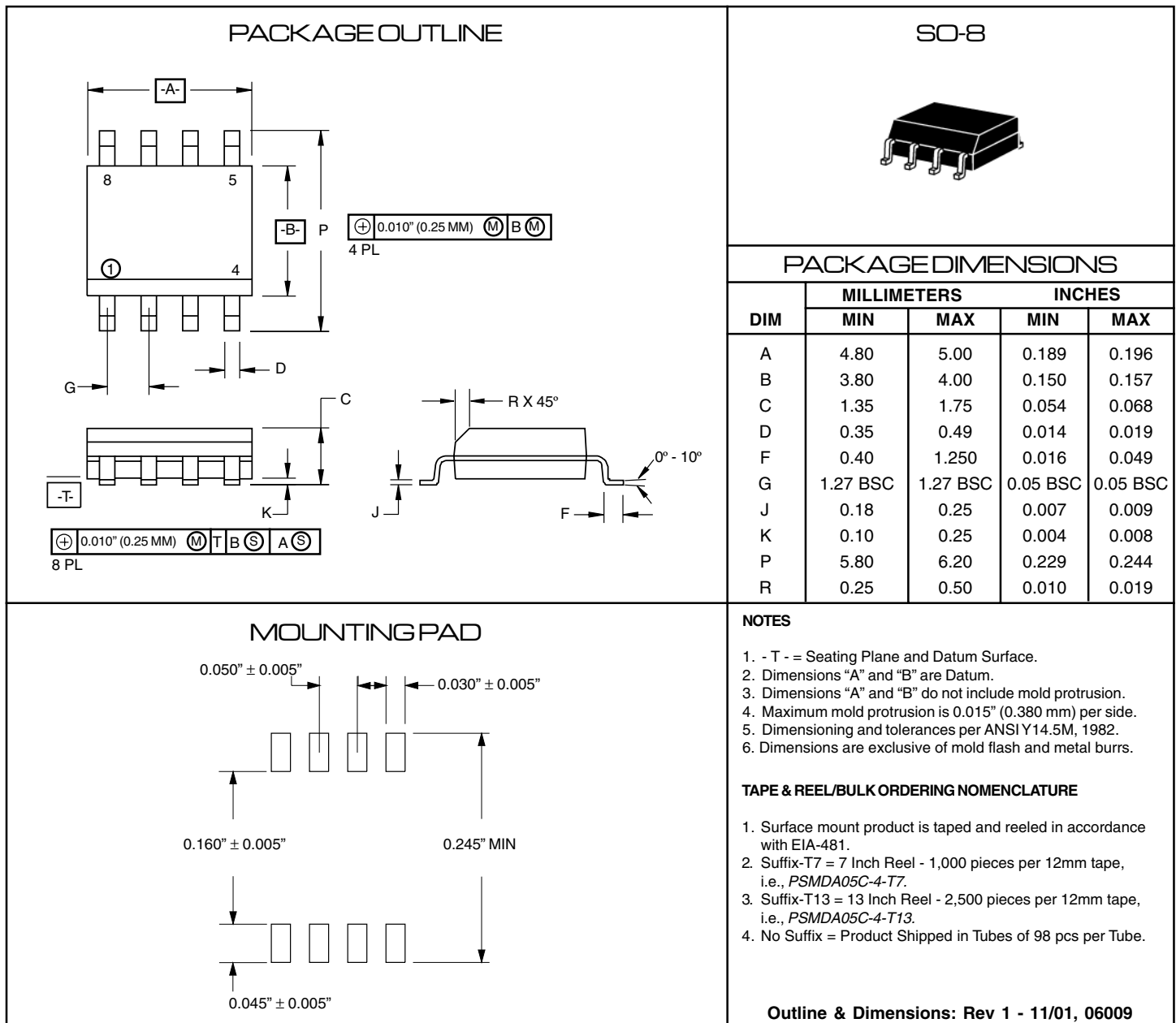


**FIGURE 3
POWER DERATING CURVE**



PSMDA05C-4 thru PSMDA24C-4

PACKAGE OUTLINE & DIMENSIONS



COPYRIGHT © ProTek Devices 2003

SPECIFICATIONS: ProTek reserves the right to change the electrical and or mechanical characteristics described herein without notice (except JEDEC).

DESIGN CHANGES: ProTek reserves the right to discontinue product lines without notice, and that the final judgement concerning selection and specifications is the buyer's and that in furnishing engineering and technical assistance, ProTek assumes no responsibility with respect to the selection or specifications of such products.

ProTek Devices

2929 South Fair Lane, Tempe, AZ 85282

Tel: 602-431-8101 Fax: 602-431-2288

E-Mail: sales@protekdevices.com

Web Site: www.protekdevices.com