

BIDIRECTIONAL MONOLITHIC TVS DIODE ARRAY

APPLICATIONS

- ✓ Multiple I/O Port Protection
- ✓ Board Level Interface Connection
- ✓ RS-232, RS-422 & RS-423
- ✓ Portable Electronics

IEC COMPATIBILITY (EN61000-4)

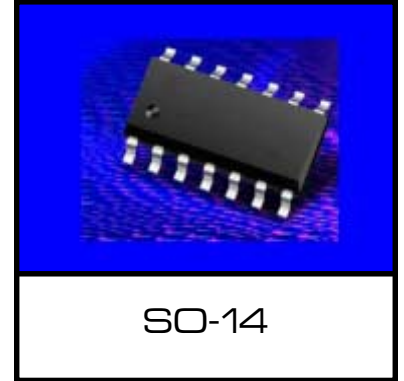
- ✓ 61000-4-2 (ESD): Air - 15kV, Contact - 8kV
- ✓ 61000-4-4 (EFT): 40A - 5/50ns
- ✓ 61000-4-5 (Surge): 12A, 8/20 μ s - Level 1(Line-Gnd) & Level 2(Line-Line)

FEATURES

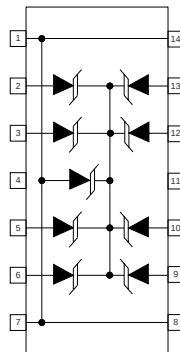
- ✓ 450 Watts Peak Pulse Power per Line ($t_p = 8/20 \mu$ s)
- ✓ ESD Protection > 40 kilovolts
- ✓ 8 Bidirectional Lines (Monolithic Design)
- ✓ Designed for I/O Protection
- ✓ Available in 4 Voltage Types Ranging from 5.0V to 24V

MECHANICAL CHARACTERISTICS

- ✓ Molded JEDEC SO-14 Package
- ✓ Weight 0.15 grams (Approximate)
- ✓ Flammability Rating UL 94V-0
- ✓ 16mm Tape and Reel Per EIA Standard 481
- ✓ Device Marking: Marking Code & Logo
- ✓ Pin 1 Indicated By DOT on Top of Package



CIRCUIT DIAGRAM



PSMDA05C-8 thru PSMDA24C-8

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}	450	Watts
Operating Temperature	T_J	-55°C to 150°C	°C
Storage Temperature	T_{STG}	-55°C to 150°C	°C

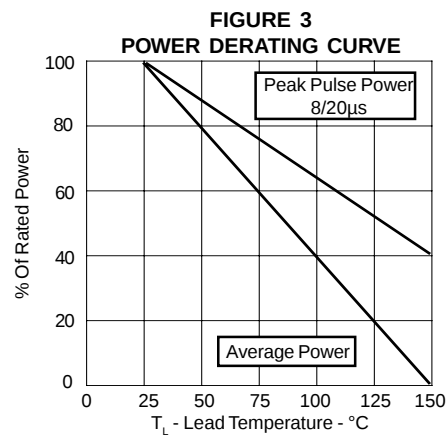
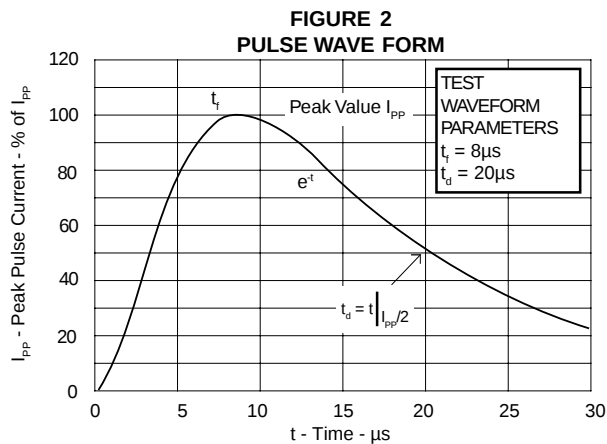
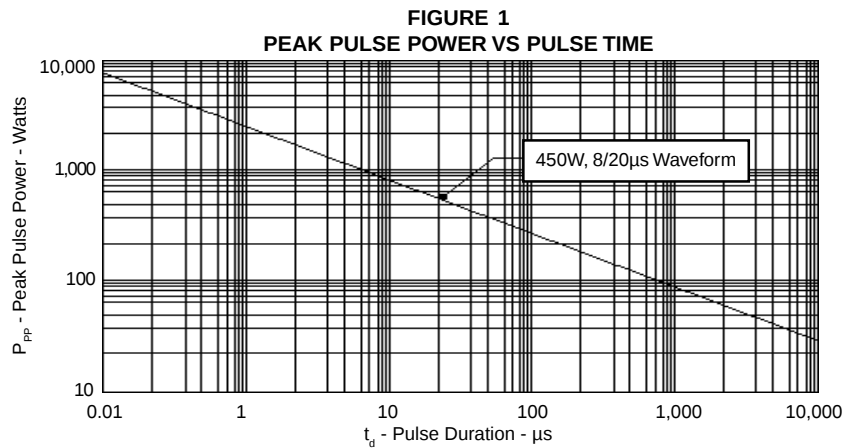
ELECTRICAL CHARACTERISTICS PER LINE @ 25°C Unless Otherwise Specified							
PART NUMBER (See Note 1)	DEVICE MARKING CODE	RATED STAND-OFF VOLTAGE V_{WM} VOLTS	MINIMUM BREAKDOWN VOLTAGE @ 1mA $V_{(BR)}$ VOLTS	MAXIMUM CLAMPING VOLTAGE (See Fig. 2) @ $I_p = 1A$ V_C VOLTS	MAXIMUM CLAMPING VOLTAGE (See Fig. 2) @ 8/20 μs $V_C @ I_{PP}$	MAXIMUM LEAKAGE CURRENT @ V_{WM} I_D μA	MAXIMUM CAPACITANCE 0V @ 1 MHz C pF
PSMDA05C-8	SEB	5.0	6.0	9.8	15.4V @ 30A	100	350
PSMDA12C-8	SED	12.0	13.4	19.0	26.4V @ 17A	1	150
PSMDA15C-8	SEF	15.0	16.7	24.0	32.4V @ 14A	1	120
PSMDA24C-8	SEH	24.0	26.7	40.0	45.0V @ 10A	1	100

PSMDA05C-8

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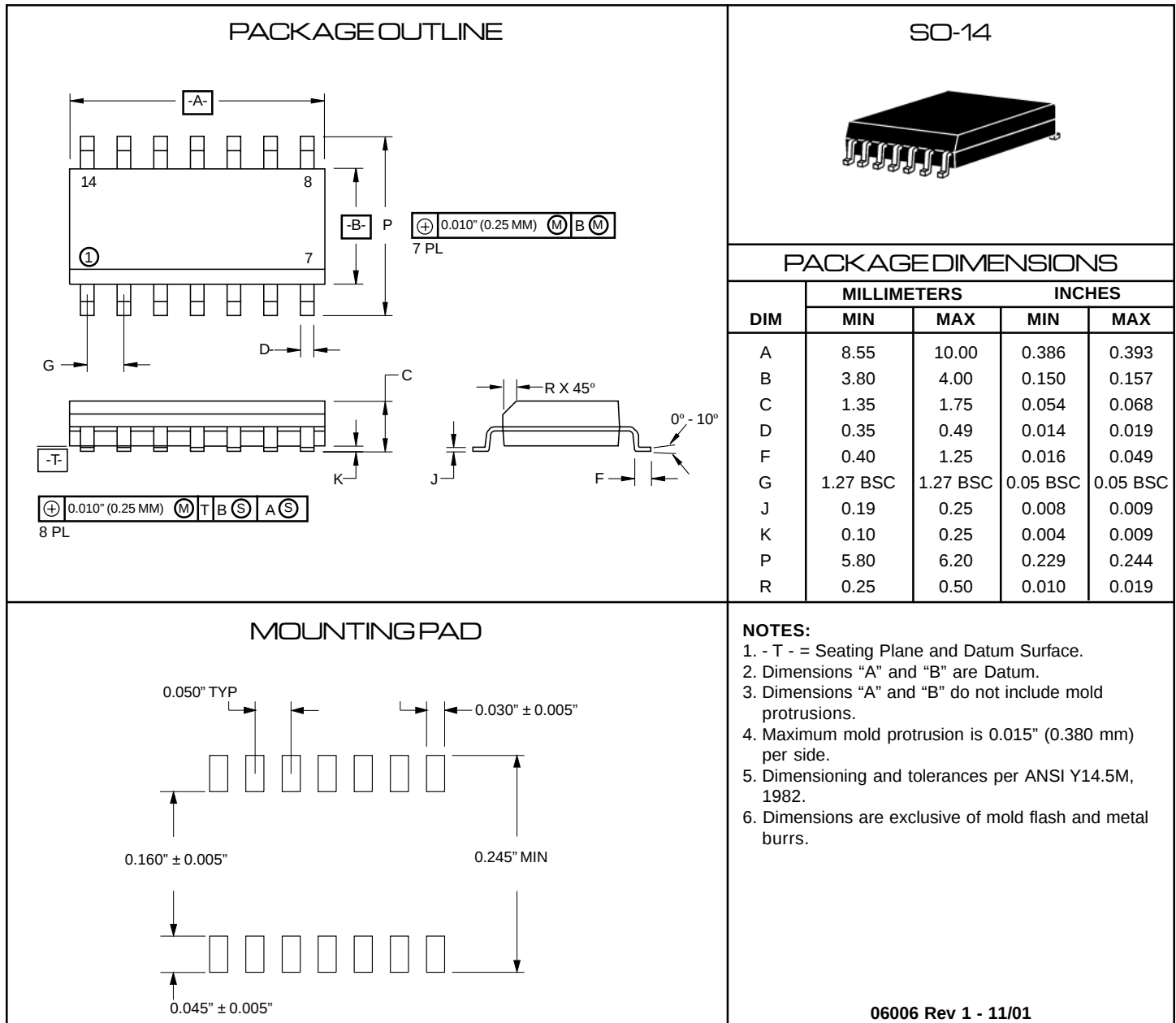
PSMDA24C-8

GRAPHS



PSMDA05C-8 thru PSMDA24C-8

PACKAGE OUTLINE & DIMENSIONS



PART NUMBER SUFFIXES USED FOR TAPE & REEL/BULK ORDERING:

Surface mount product is taped and reeled in accordance with EIA-481.
 Suffix-T7 = 7 Inch Reel - 1,000 pieces per reel i.e.: PSMDA05C-8-T7
 Suffix-T13 = 13 Inch Reel - 2,500 pieces per reel i.e.: PSMDA05C-8-T13
 No Suffix = Product Shipped in Tubes of 55 pcs per Tube

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