

BIDIRECTIONAL MONOLITHIC TVS DIODE ARRAY

APPLICATIONS

- ✓ RS-232, RS-422, & RS-423 Data Lines
- ✓ Microprocessor Based Equipment
- ✓ Controller & Monitoring Equipment
- ✓ Modems
- ✓ Portable Electronics

IEC COMPATIBILITY (EN61000-4)

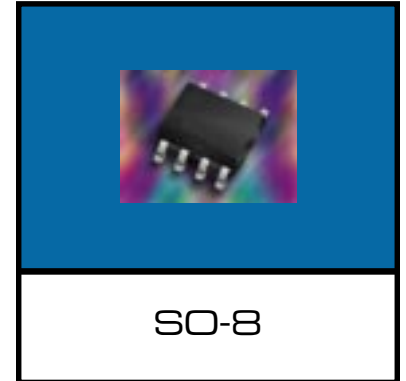
- ✓ 61000-4-2 (ESD): Air - 15kV, Contact - 8kV
- ✓ 61000-4-4 (EFT): 40A - 5/50ns
- ✓ 61000-4-5 (Surge): 12A, 8/20 μ s - Level 1(Line-Gnd) & Level 2(Line-Line)

FEATURES

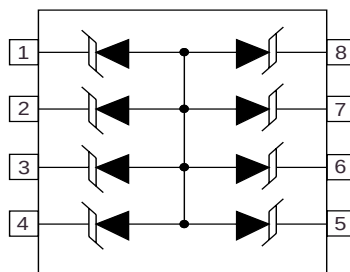
- ✓ 500 Watts Peak Pulse Power per Line ($t_p = 8/20\mu$ s)
- ✓ ESD Protection > 40 Kilvolts
- ✓ Available in 5 Voltage Types Ranging from 5.0V to 24V
- ✓ Bidirectional Configurations & Monolithic Design

MECHANICAL CHARACTERISTICS

- ✓ Molded JEDEC SO-8
- ✓ Weight 0.1 gram (Approximate)
- ✓ Flammability Rating UL 94V-0
- ✓ 12mm Tape and Reel Per EIA Standard 481
- ✓ Device Marking: Marking Code & Logo
- ✓ Pin 1 Indicated By Dot on Top of Package



CIRCUIT DIAGRAM



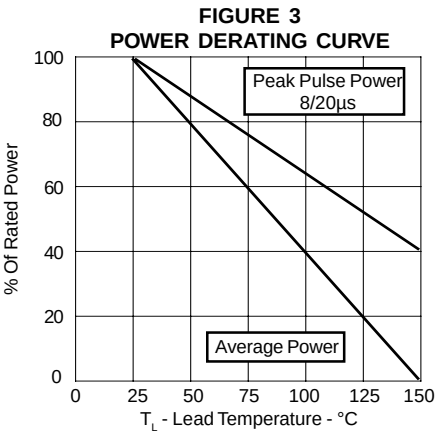
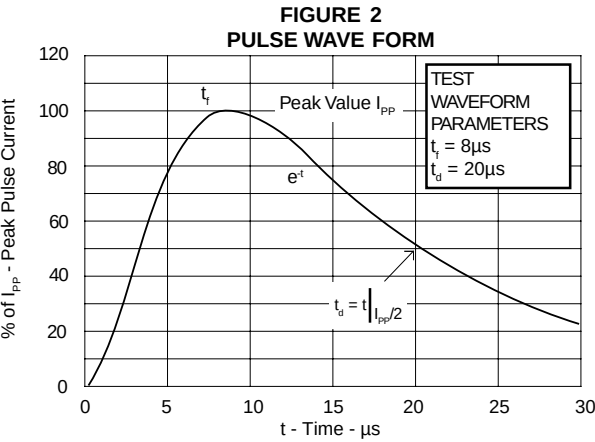
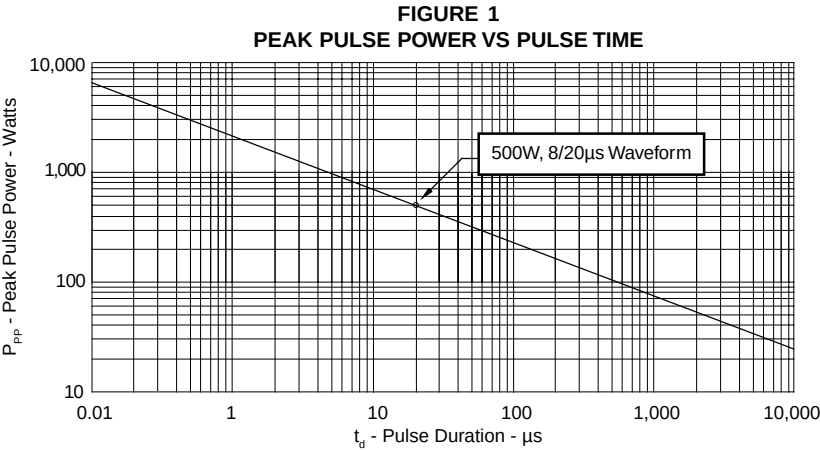
SMDA05CM thru SMDA24CM

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

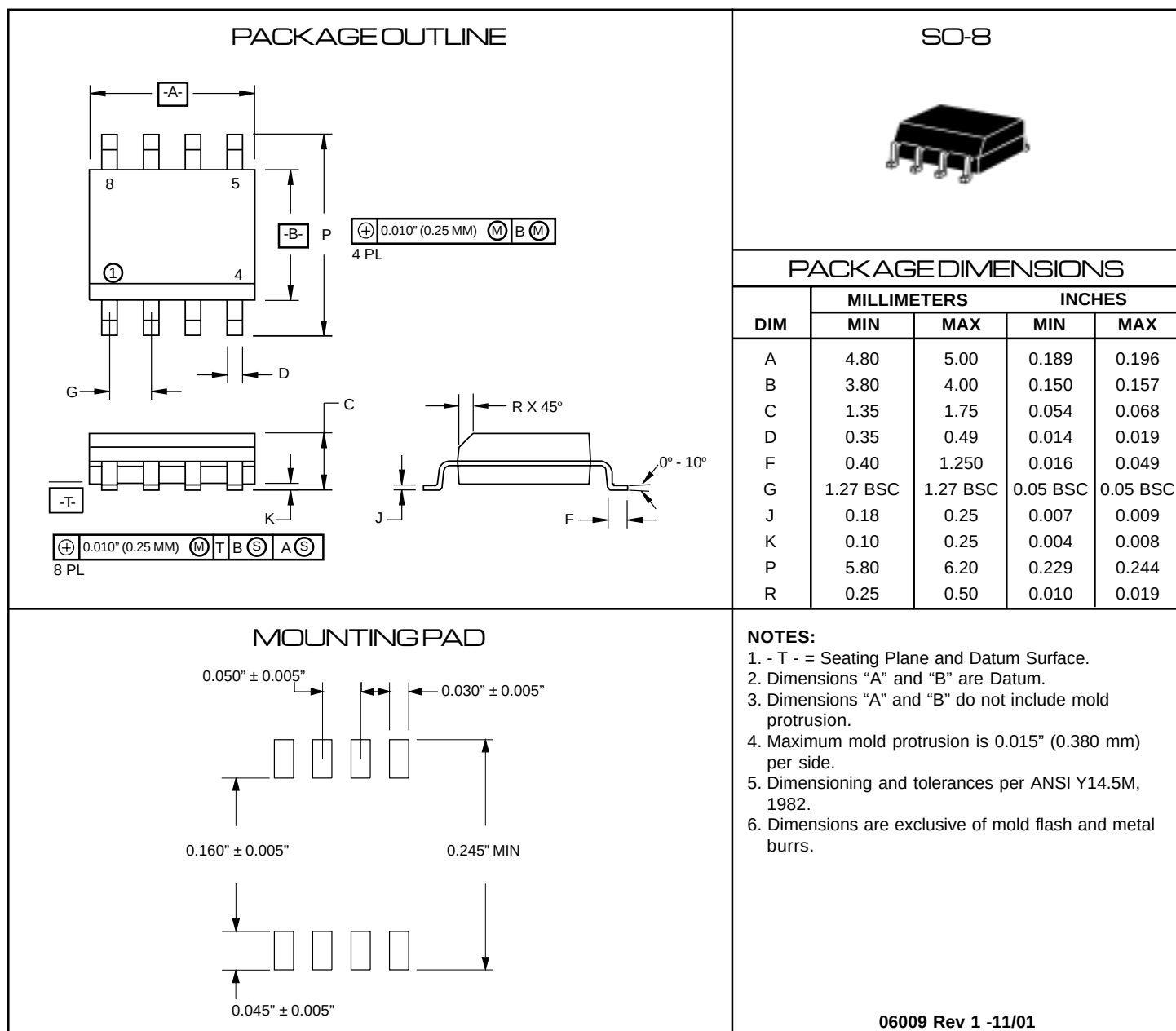
ELECTRICAL CHARACTERISTICS PER LINE @ 25°C Unless Otherwise Specified							
PART NUMBER (See Note 1)	DEVICE MARKING CODE	RATED STAND-OFF VOLTAGE V_{WM} VOLTS	MINIMUM BREAKDOWN VOLTAGE @ 1mA $V_{(BR)}$ VOLTS	MAXIMUM CLAMPING VOLTAGE (See Fig. 2) @ $I_p = 1A$ V_C VOLTS	MAXIMUM CLAMPING VOLTAGE (See Fig. 2) @ 8/20 μs $V_C @ I_{PP}$	MAXIMUM LEAKAGE CURRENT @ V_{WM} I_D μA	MAXIMUM CAPACITANCE 0V @ 1 MHz C pF
SMDA05CM	REB	5.0	6.0	9.8	19.0V @ 30A	100	350
SMDA08CM	REC	8.0	8.5	13.4	23.7V @ 24A	10	300
SMDA12CM	RED	12.0	13.4	19.0	29.2V @ 20A	1	150
SMDA15CM	REF	15.0	16.7	24.0	31.1V @ 18A	1	100
SMDA24CM	REH	24.0	26.7	43.0	45.0V @ 13A	1	63

GRAPHS



SMDA05CM thru SMDA24CM

PACKAGE OUTLINE & DIMENSIONS



TAPE & REEL PACKAGING:

Surface mount product is taped and reeled in accordance with EIA-481, reel quantities and sizes are as follows:

7 Inch Reel - 1,000 pieces per reel; 13 Inch Reel - 2,500 pieces per reel

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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