

STANDARD CAPACITANCE TVS ARRAY

APPLICATIONS

- ✓ RS-232, RS-422 & RS-423 Data Lines
- ✓ Cellular Phones
- ✓ Audio/Video Inputs
- ✓ Portable Electronics
- ✓ Wireless Network Systems
- ✓ Medical Sensors

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

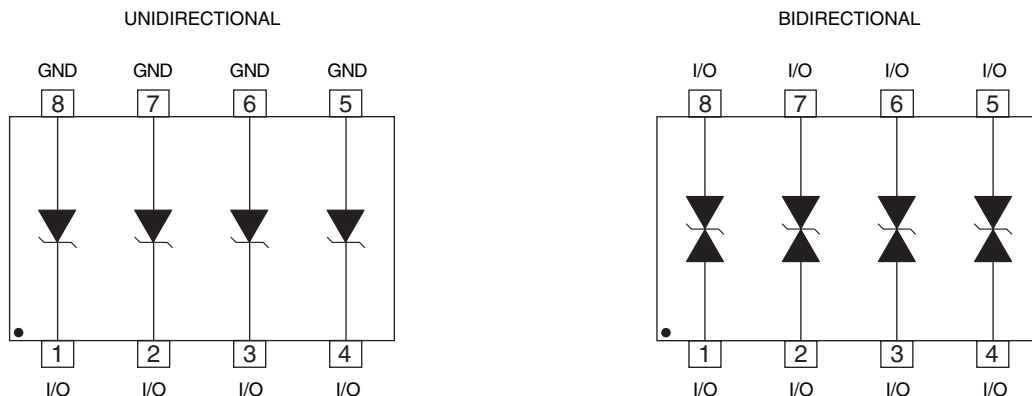
- ✓ 500 Watts Peak Pulse Power per Line ($t_p=8/20\mu$ s)
- ✓ Unidirectional & Bidirectional Configurations
- ✓ Available in Voltage Types Ranging From: 3V to 36V
- ✓ Protects Up to Four (4) Lines
- ✓ ESD Protection > 40 kilovolts
- ✓ RoHS Compliant in Lead-Free Versions

MECHANICAL CHARACTERISTICS

- ✓ Molded JEDEC SO-8 Package
- ✓ Weight 70 milligrams (Approximate)
- ✓ Available in Tin-Lead or Lead-Free Pure-Tin Plating(Annealed)
- ✓ Solder Reflow Temperature:
 - Tin-Lead - Sn/Pb, 85/15: 240-245°C
 - Pure-Tin - Sn, 100: 260-270°C
- ✓ 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 CONFIGURATIONS



DEVICE CHARACTERISTICS

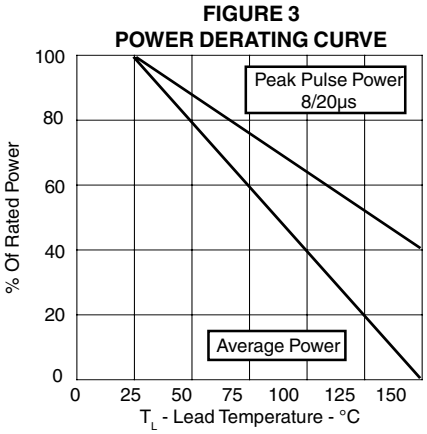
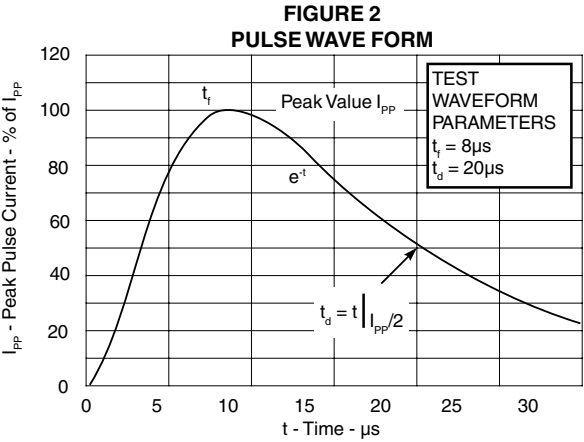
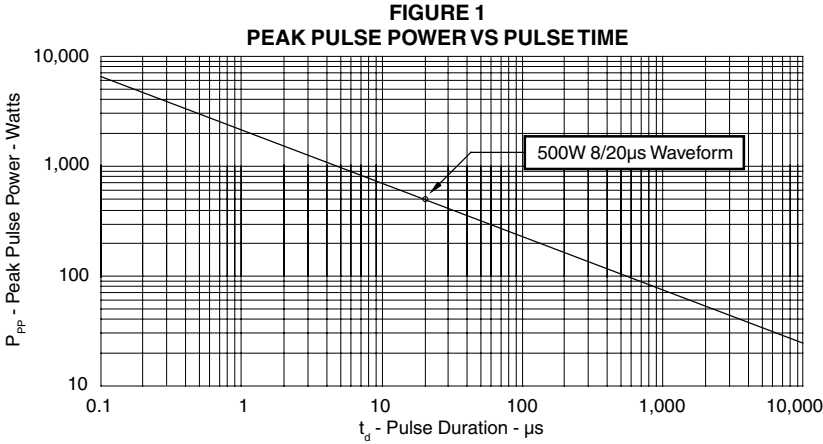
MAXIMUM RATINGS @ 25°C Unless Otherwise Specified			
PARAMETER	SYMBOL	VALUE	UNITS
Peak Pulse Power ($t_p = 8/20\mu s$) - See Figure 1	P_{PP}	500	Watts
Operating Temperature	T_J	-55°C to 150°C	°C
Storage Temperature	T_{STG}	-55°C to 150°C	°C
Forward Voltage @ 100mA, 300μs - Square Wave (Note 1)	V_F	1.5	Volts

Note 1: Only applies to unidirectional devices.

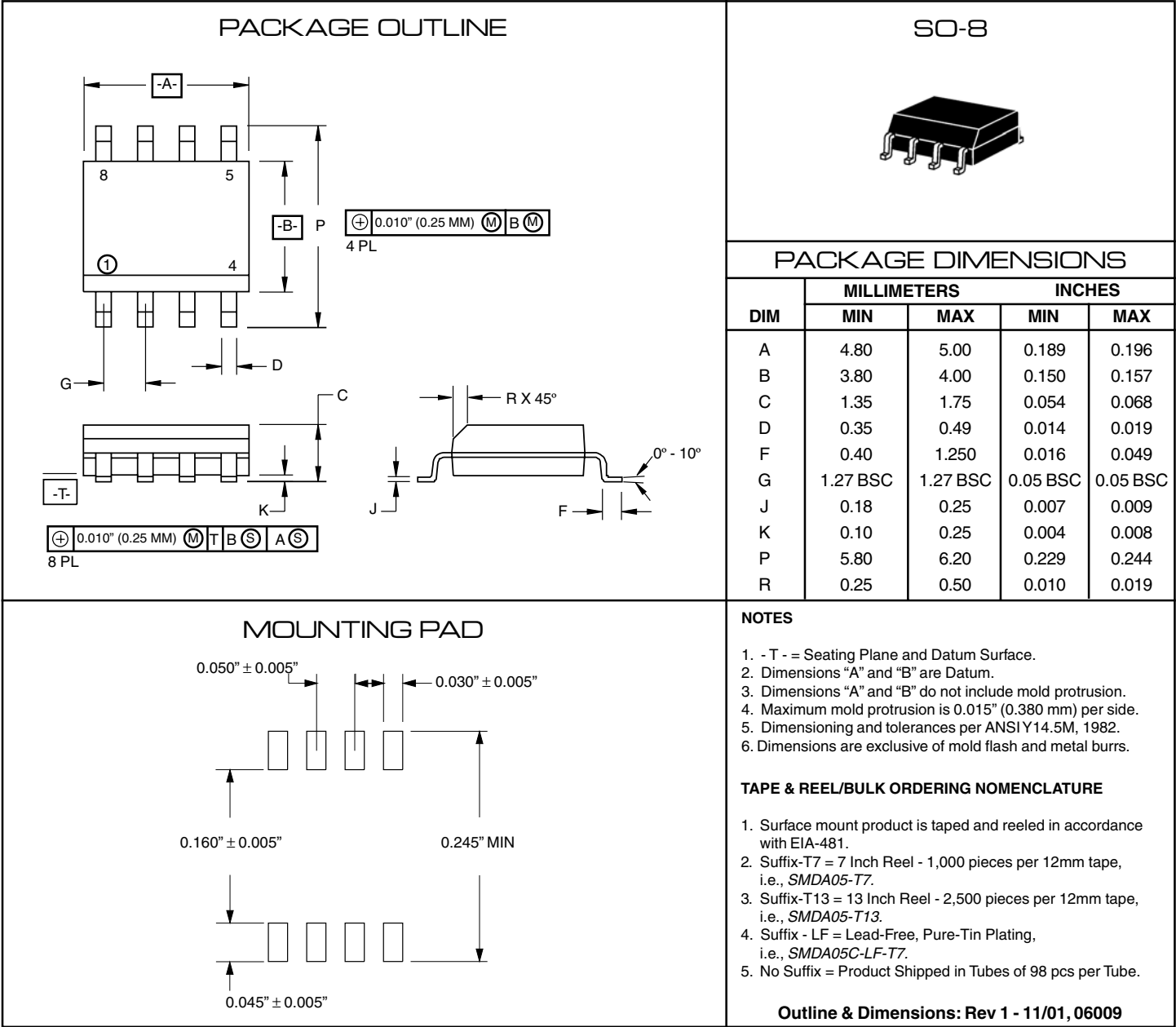
ELECTRICAL CHARACTERISTICS PER LINE @ 25°C Unless Otherwise Specified							
PART NUMBER (See Note 1)	DEVICE MARKING CODE	RATED STAND-OFF VOLTAGE V_{WM} VOLTS	MINIMUM BREAKDOWN VOLTAGE @ 1mA $V_{(BR)}$ VOLTS	MAXIMUM CLAMPING VOLTAGE (See Fig. 2) @ $I_p = 1A$ V_C VOLTS	MAXIMUM CLAMPING VOLTAGE (See Fig. 2) @ 8/20μs $V_C @ I_{PP}$	MAXIMUM LEAKAGE CURRENT @ V_{WM} I_D μA	MAXIMUM CAPACITANCE PER LINE @ 0V, 1 MHz C pF
SMDA03	SDL	3.3	4.0	6.5	10.9V @ 43.0A	125	800
SMDA03C	SDM	3.3	4.5	7.0	10.9V @ 43.0A	125	450
SMDA05	SDA	5.0	6.0	9.8	13.5V @ 42.0A	20	550
SMDA05C	SDB	5.0	6.0	9.8	13.5V @ 42.0A	20	308
SMDA08	SDJ	8.0	8.5	13.4	16.9V @ 34.0A	10	500
SMDA08C	SDK	8.0	8.5	13.4	16.9V @ 34.0A	10	300
SMDA12	SDC	12.0	13.3	19.0	25.9V @ 27.0A	1	185
SMDA12C	SDD	12.0	13.3	19.0	25.9V @ 27.0A	1	105
SMDA15	SDE	15.0	16.7	24.0	30.0V @ 17.0A	1	140
SMDA15C	SDF	15.0	16.7	24.0	30.0V @ 17.0A	1	80
SMDA24	SDG	24.0	26.7	43.0	49.0V @ 12.0A	1	88
SMDA24C	SDH	24.0	26.7	43.0	49.0V @ 12.0A	1	50
SMDA36	SDN	36.0	40.0	51.0	76.8V @ 9.0A	1	80
SMDA36C	SDP	36.0	40.0	51.0	76.8V @ 9.0A	1	45

Note 1: Part numbers with a "C" suffix are bidirectional devices, i.e., SMDA03C.

GRAPHS



PACKAGE OUTLINE & DIMENSIONS



COPYRIGHT © ProTek Devices 2005
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