

## STEERING DIODE / TVS ARRAY COMBO

### APPLICATIONS

- ✓ USB Power & Data Line Protection
- ✓ RS-422 & RS-485 Network Protection
- ✓ Computer I/O Ports
- ✓ Audio/Video Inputs
- ✓ Microcontroller Interface Protection

### 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 $\mu$ s - Level 2(Line-Gnd) & Level 3(Line-Line)

### FEATURES

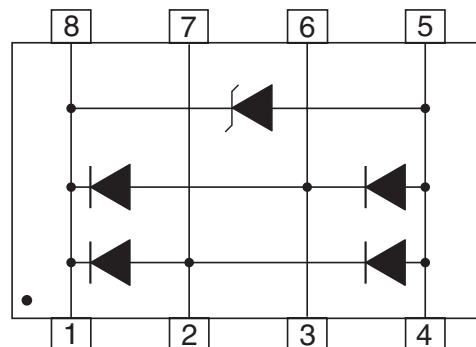
- ✓ 500 Watts Peak Pulse Power per Line (tp=8/20 $\mu$ s)
- ✓ ESD Protection > 40 kilovolts
- ✓ Protects Two (2) I/O Ports and Bus Lines
- ✓ Available in 2 Voltage Types 3.3V & 5V
- ✓ **LOW CAPACITANCE: 15pF**
- ✓ RoHS Compliant in Lead-Free Versions

### 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 CONFIGURATION



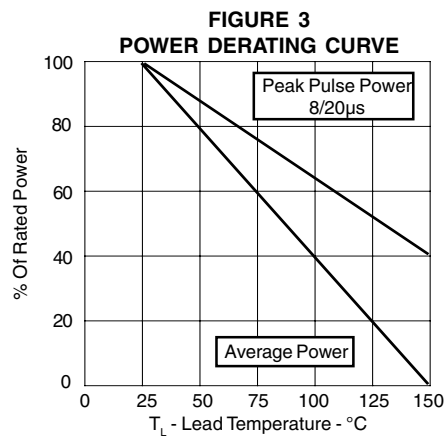
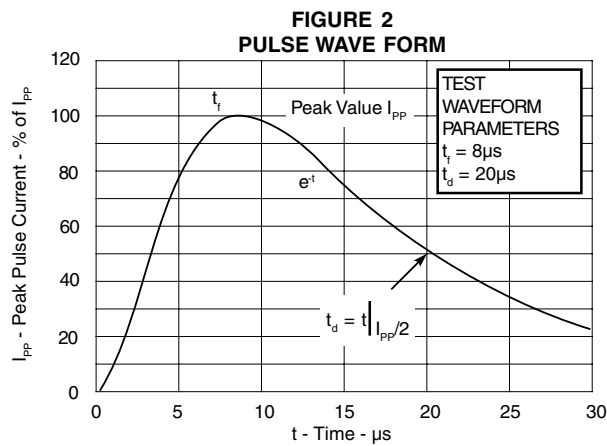
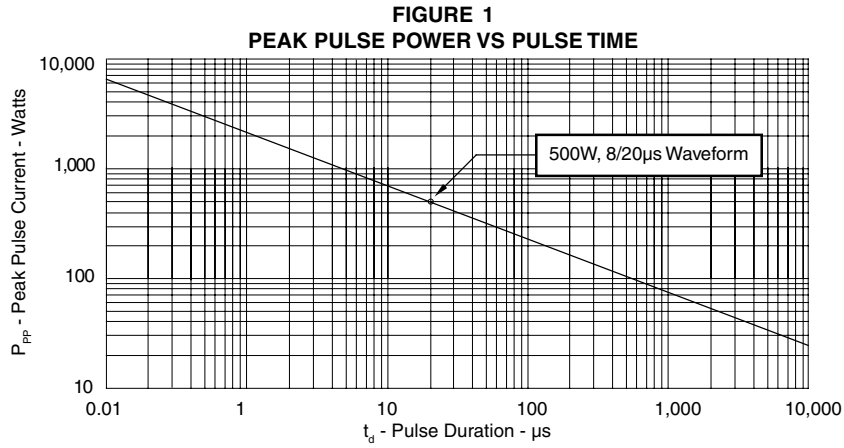
**DEVICE CHARACTERISTICS**

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

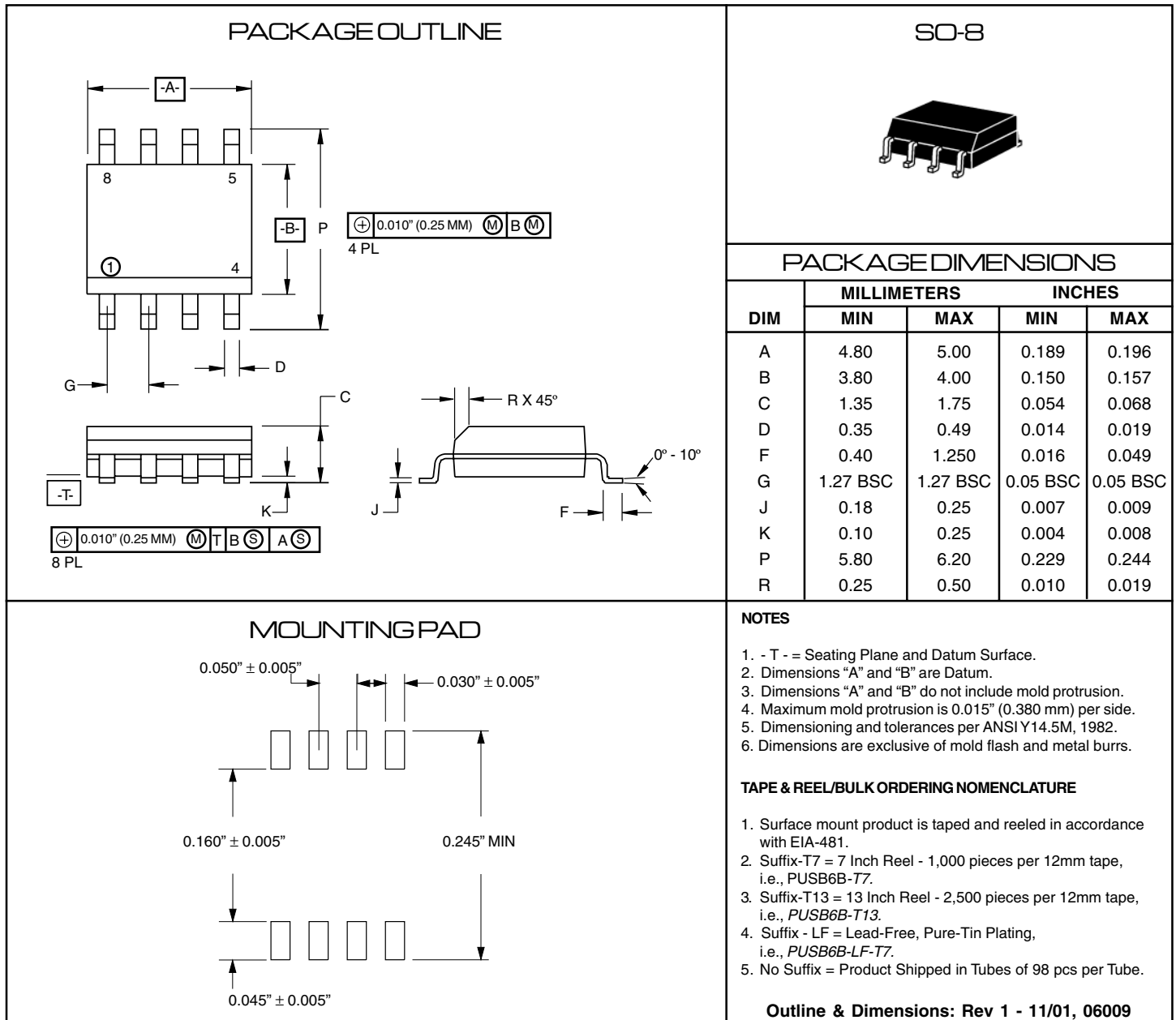
ELECTRICAL CHARACTERISTICS PER LINE @ 25°C Unless Otherwise Specified							
PART NUMBER (See Note 1)	DEVICE MARKING CODE	RATED STAND-OFF VOLTAGE	MINIMUM BREAKDOWN VOLTAGE	MAXIMUM CLAMPING VOLTAGE (See Fig. 2)	MAXIMUM CLAMPING VOLTAGE (See Fig. 2)	MAXIMUM LEAKAGE CURRENT	MAXIMUM CAPACITANCE
		$V_{WM}$ VOLTS	@ 1mA $V_{(BR)}$ VOLTS	@ $I_P = 1A$ $V_C$ VOLTS	@ 8/20 $\mu s$ $V_C @ I_{PP}$	@ $V_{WM}$ $I_D$ $\mu A$	@ 0V, 1 MHz $C_{j(SD)}$ pF
PUSB3B	PRQ	3.3	4.0	6.0	12.9V @ 37A	125	15
PUSB6B	PRR	5.25	6.0	7.0	13.2V @ 35A	10	15

**Note 1:** Electrical specifications refer to pins 1 to pin 4 or pin 5 to pin 8.

GRAPHS



**PACKAGE OUTLINE & DIMENSIONS**



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**ProTek Devices**  
2929 South Fair Lane, Tempe, AZ 85282  
Tel: 602-431-8101 Fax: 602-431-2288  
E-Mail: [sales@protekdevices.com](mailto:sales@protekdevices.com)  
Web Site: [www.protekdevices.com](http://www.protekdevices.com)