

STEERING DIODE/TVS ARRAY COMBO

APPLICATIONS

- ✓ T1/E1 & T3/E3 Line Cards
- ✓ ISDN U-Interface & S/T Interface
- ✓ xDSL
- ✓ Ethernet - 10/100 Base T

IEC COMPATIBILITY (EN61000-4)

- ✓ 61000-4-2 (ESD): Air - 15kV, Contact - 8kV
- ✓ 61000-4-4 (EFT): 40A - 5/50ns
- ✓ 61000-4-5 (Surge): 8/20 μ s - L4, 95A(Line-Gnd) & L4, 48A(Line-Line)

FEATURES

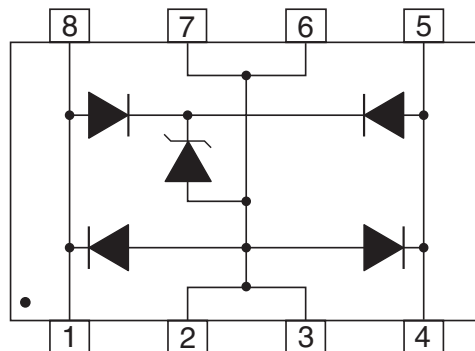
- ✓ 2000 Watts Peak Power per Line (tp = 8/20 μ s)
- ✓ Protects Two (2) Lines
- ✓ 100A (2/10 μ s) per Bellcore GR-1089(Intra-Building)
- ✓ ESD Protection > 25 kilovolts
- ✓ Low Capacitance: < 20pF
- ✓ RoHS Compliant

MECHANICAL CHARACTERISTICS

- ✓ Molded JEDEC SO-8
- ✓ Weight 70 milligrams (Approximate)
- ✓ Available in Lead-Free Pure-Tin Plating(Annealed)
- ✓ Solder Reflow Temperature:
Pure-Tin - Sn, 100: 260-270°C
- ✓ Consult Factory for Leaded Device Availability
- ✓ 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 (tp = 8/20μs) - See Figure 1	P_{PP}	2000	Watts
Operating Temperature	T_L	-55 to 150	°C
Storage Temperature	T_{STG}	-55 to 150	°C

ELECTRICAL CHARACTERISTICS PER LINE @ 25°C Unless Otherwise Specified

PART NUMBER	DEVICE MARKING CODE	RATED STAND-OFF VOLTAGE V_{WM} VOLTS	MINIMUM BREAKDOWN VOLTAGE @ 1mA $V_{(BR)}$ VOLTS	MAXIMUM CLAMPING VOLTAGE (See Notes 1-2) (See Fig. 2) 8/20μs $V_C @ I_{PP}$ VOLTS	MAXIMUM LEAKAGE CURRENT @ V_{WM} I_b μA	TYPICAL CAPACITANCE (See Note 3) @ 0V, 1 MHz $C_{J(SD)}$ pF	TYPICAL CAPACITANCE (See Note 4) @ 0V, 1 MHz $C_{J(SD)}$ pF
PLC03-6	PBA	6.0	6.8	20.0V @ 100.0A	25	16	8

Note 1: For an 8/20μs waveform, apply positive pulse to pin 1 to 8 to pin 2 or 3 (ground).

Note 2: Measured between pin 1 or 8 to pin 2 or 3; pin 1 or 8 to pin 4 or 5.

Note 3: Measured between I/O pins and ground (pin 1 to 2).

Note 4: Measured between I/O pins (pins 1 to 4).

GRAPHS

FIGURE 1
PEAK PULSE POWER VS PULSE TIME

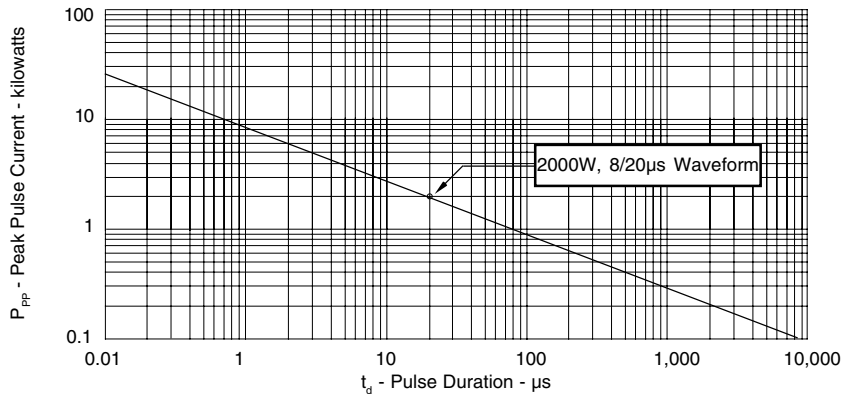


FIGURE 2
PULSE WAVE FORM

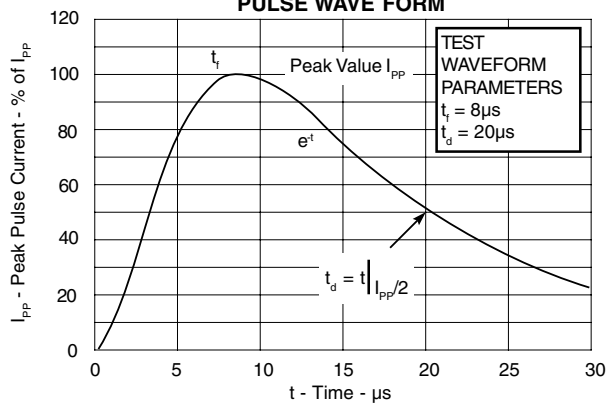
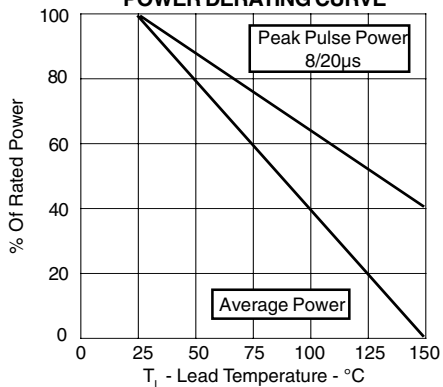
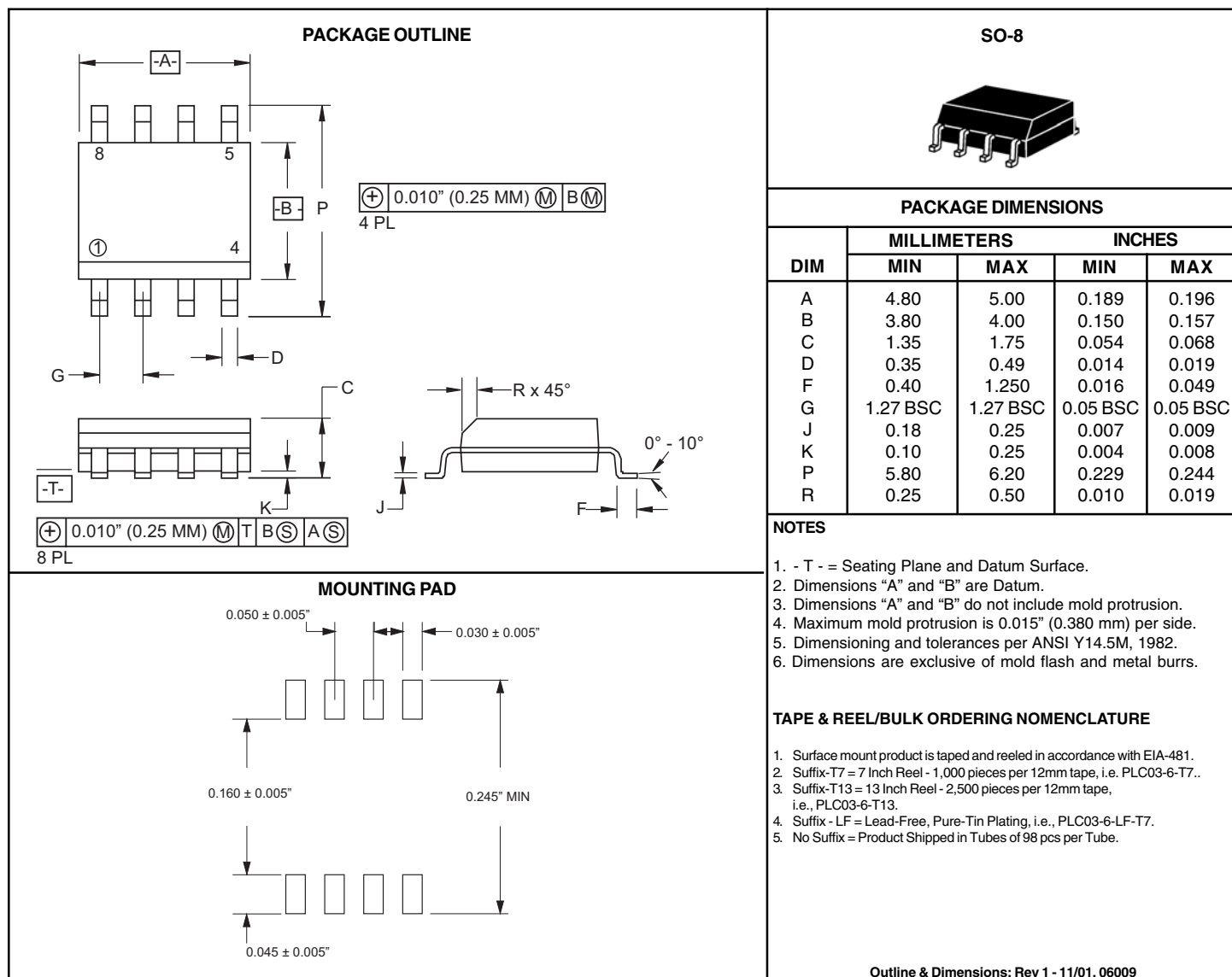


FIGURE 3
POWER DERATING CURVE



PLC03-6

SO-8 PACKAGE OUTLINE & DIMENSIONS



COPYRIGHT © ProTek Devices 2007

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