

## LOW CAPACITANCE TVS ARRAY

## APPLICATIONS

- ✓ T1/E1 Line Cards
- ✓ ISDN Telecom Equipment
- ✓ xDSL, USB, SCSI & Ethernet Interfaces
- ✓ Cellular Base Stations
- ✓ Data & Bus Lines for FCC Part 68 Applications

## IEC COMPATIBILITY (EN61000-4)

- ✓ 61000-4-2 (ESD): Air - 15kV, Contact - 8kV
- ✓ 61000-4-4 (EFT): 40A - 5/50ns
- ✓ 61000-4-5 (Surge): 48A, 8/20 $\mu$ s, L3(Line-Gnd), L4(Line-Line) & L1(Power)

## FEATURES

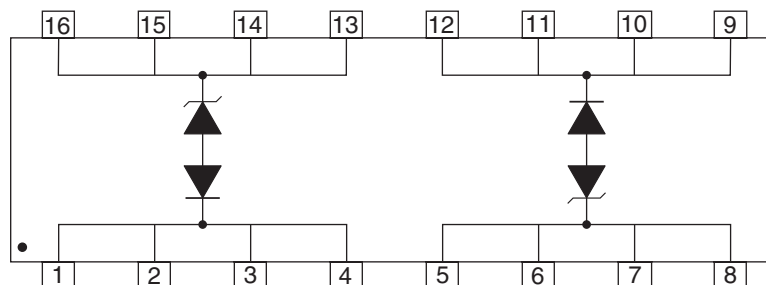
- ✓ ESD Protection > 40 kilovolts
- ✓ 1,500 Watts Peak Pulse Power per Line (tp=10/1000 $\mu$ s)
- ✓ Low Clamping Voltage
- ✓ 100A (10/1000 $\mu$ s) per Bellcore 1089(Intra-Building)
- ✓ 200A (10/160 $\mu$ s) per FCC Part 68
- ✓ Bidirectional Configuration
- ✓ Protects 1 Line
- ✓ RoHS Compliant

## MECHANICAL CHARACTERISTICS

- ✓ Molded JEDEC SO-16 (Wide Body) Package
- ✓ Weight 0.5 grams (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
- ✓ 16mm Tape and Reel per EIA Standard 481
- ✓ Packaging: 25 Pieces Per Tube
- ✓ Marking: Logo, Part Number, Date Code & Pin One Defined By Dot on Top of Package



## PIN CONFIGURATION



# PLC01-6

## DEVICE CHARACTERISTICS

### MAXIMUM RATINGS @ 25°C Unless Otherwise Specified

PARAMETER	SYMBOL	VALUE	UNITS
Operating Temperature	$T_L$	-55 to 150	°C
Storage Temperature	$T_{STG}$	-55 to 150	°C
Peak Pulse Power ( $t_d = 10/1000\mu s$ ) - See Figure 1	$P_{PP}$	1,500	Watts

### ELECTRICAL CHARACTERISTICS PER LINE @ 25°C Unless Otherwise Specified

PART NUMBER (See Note 1)	RATED STAND-OFF VOLTAGE $V_{WM}$ VOLTS	MINIMUM BREAKDOWN VOLTAGE @ 1mA $V_{(BR)}$ VOLTS	MAXIMUM CLAMPING VOLTAGE (See Note 2) @ $I_p = 100A$ $V_C$ VOLTS	MAXIMUM CLAMPING VOLTAGE (See Note 3) @ $I_p = 200A$ $V_C$ VOLTS	MAXIMUM LEAKAGE CURRENT @ $V_{WM}$ $I_D$ $\mu A$	TYPICAL CAPACITANCE @ 0V, 1 MHz C pF
PLC01-6	6.0	8.0	15.0	16.0	25	50

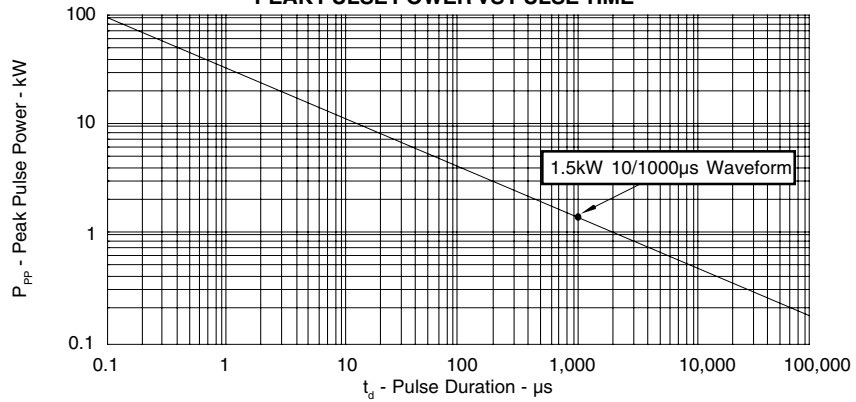
**Note 1:** Electrical characteristics apply from pins 13-16 to 1-4 and 5-8 to 9-12; see circuit diagram.

**Note 2:**  $V_C$  tested at 10/1000 $\mu s$  impulse waveform.

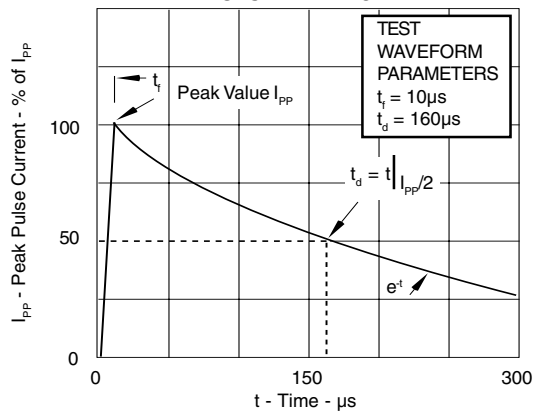
**Note 3:** 10/160 $\mu s$  impulse waveform per FCC Part 68.

## GRAPHS

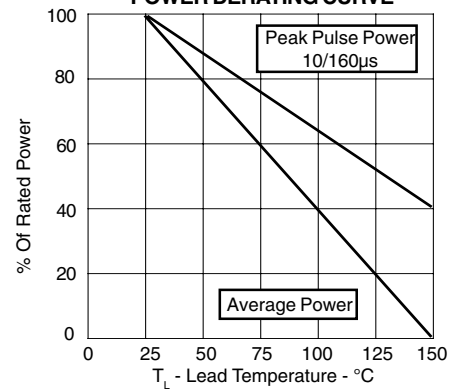
**FIGURE 1  
PEAK PULSE POWER VS PULSE TIME**



**FIGURE 2  
PULSE WAVE FORM**

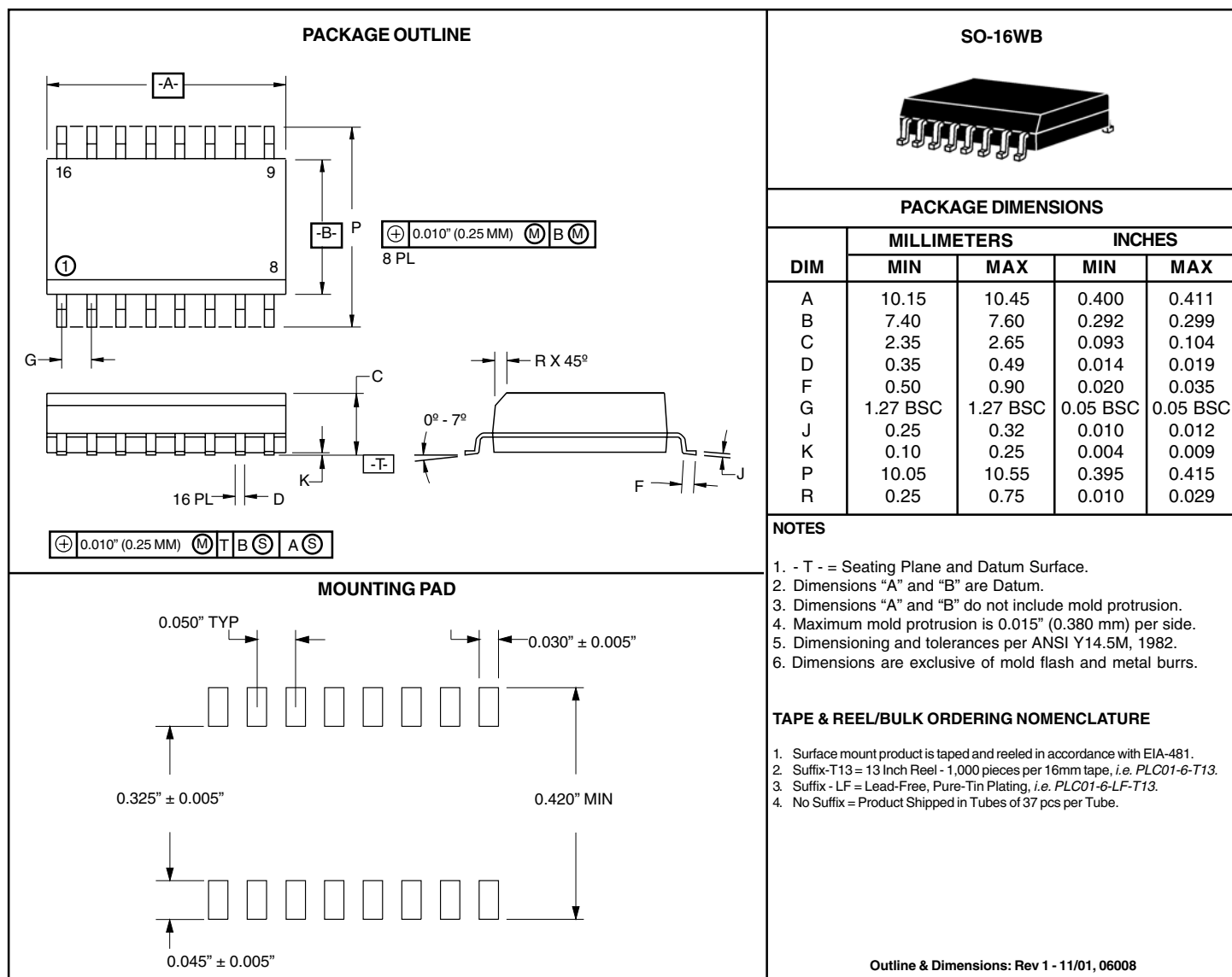


**FIGURE 3  
POWER DERATING CURVE**



# PLC01-6

## SO-16WB PACKAGE OUTLINE & DIMENSIONS



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