

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 μ s, L3(Line-Gnd), L4(Line-Line) & L1(Power)

FEATURES

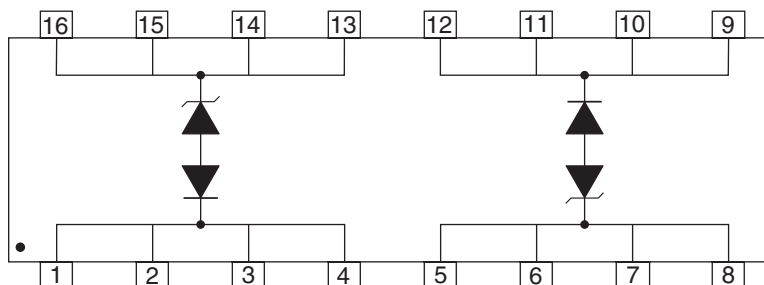
- ✓ ESD Protection > 40 kilovolts
- ✓ 1,500 Watts Peak Pulse Power per Line (tp=10/1000 μ s)
- ✓ Low Clamping Voltage
- ✓ 100A (10/1000 μ s) per Bellcore 1089(Intra-Building)
- ✓ 200A (10/160 μ s) per FCC Part 68
- ✓ Bidirectional Configuration
- ✓ Protects 1 Line
- ✓ RoHS Compliant

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 μA	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 μs impulse waveform.

Note 3: 10/160 μs impulse waveform per FCC Part 68.

GRAPHS

FIGURE 1
PEAK PULSE POWER VS PULSE TIME

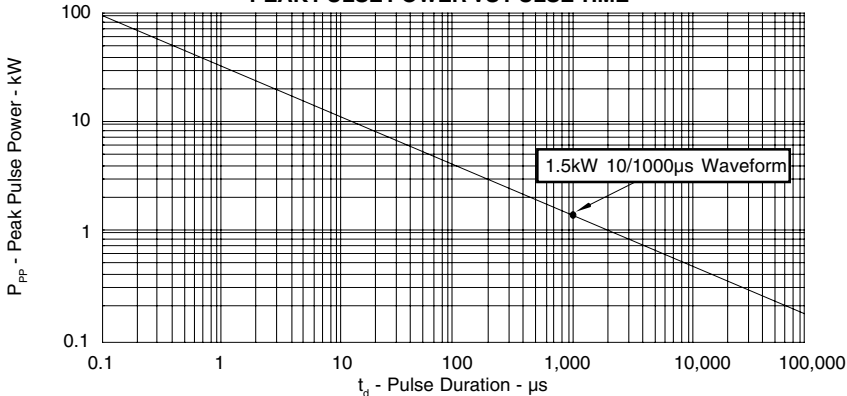


FIGURE 2
PULSE WAVE FORM

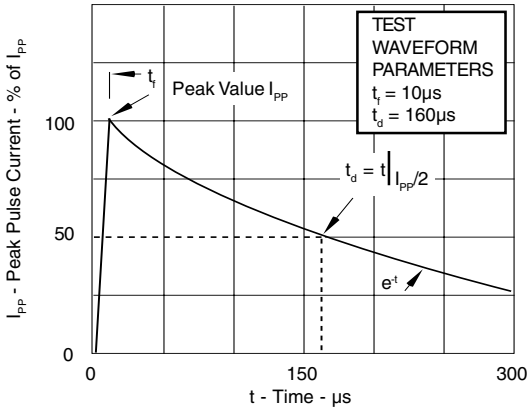
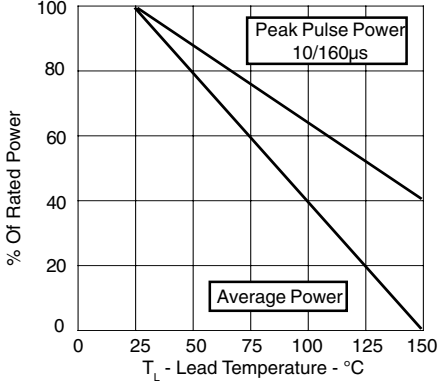
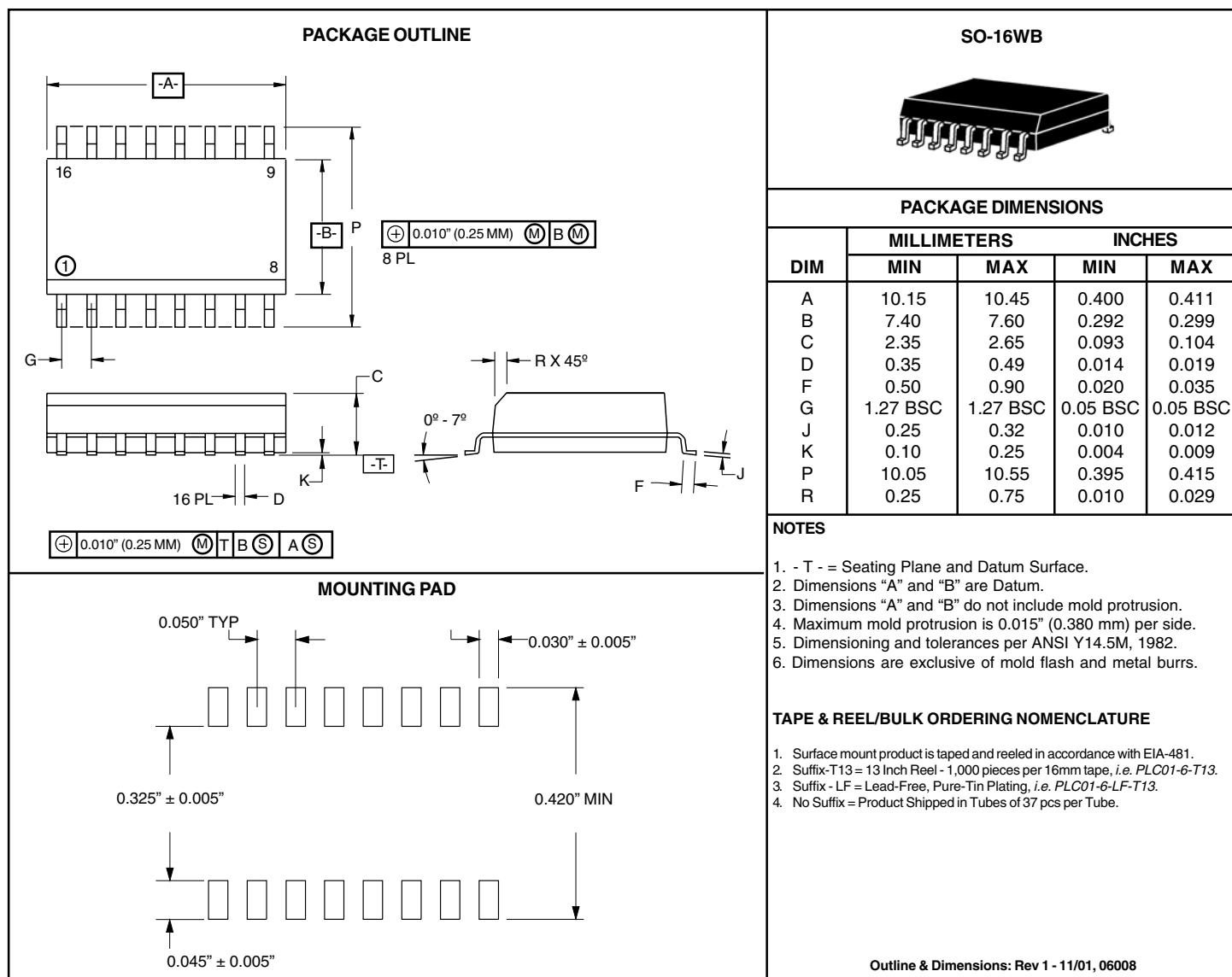


FIGURE 3
POWER DERATING CURVE



PLC01-6

SO-16WB PACKAGE OUTLINE & DIMENSIONS



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