

## 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)

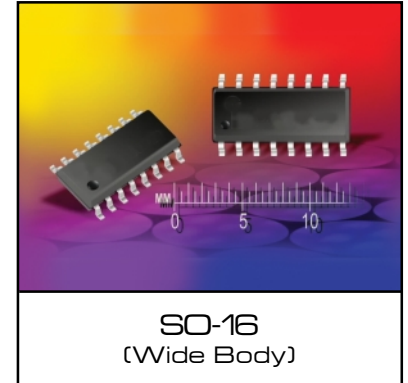
- ✓ 61000-4-2 (ESD): Air - 15kV, Contact - 8kV
- ✓ 61000-4-4 (EFT): 40A - 5/50ns
- ✓ 61000-4-5 (Surge): 48A, 8/20 $\mu$ s, L3(Line-Gnd), L4(Line-Line) & L1(Power)

### FEATURES

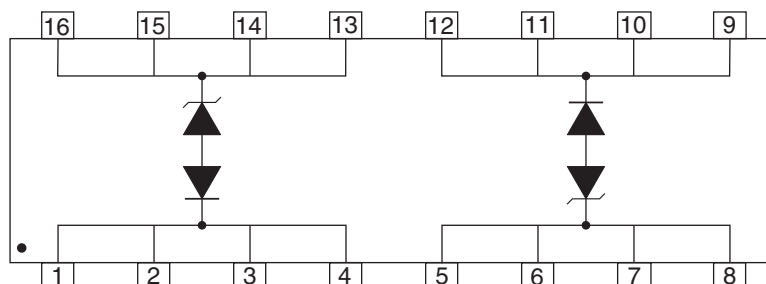
- ✓ **ESD PROTECTION > 40 kilovolts**
- ✓ 1,500 Watts Peak Pulse Power per Line (tp=10/1000 $\mu$ s)
- ✓ Low Clamping Voltage
- ✓ 100A (10/1000 $\mu$ s) per Bellcore 1089(Intra-Building)
- ✓ 200A (10/160 $\mu$ s) per FCC Part 68
- ✓ Bidirectional Configuration
- ✓ Protects 1 Line

### MECHANICAL CHARACTERISTICS

- ✓ Molded JEDEC SO-16 (Wide Body) Package
- ✓ Weight 0.15 grams (Approximate)
- ✓ Flammability rating UL 94V-0
- ✓ 16mm Tape and Reel Per EIA Standard 481
- ✓ Marking: Logo, Part Number, 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 (td = 10/1000µs) - See Figure 1	P <sub>PP</sub>	1,500	Watts
Operating Temperature	T <sub>J</sub>	-55°C to 150°C	°C
Storage Temperature	T <sub>STG</sub>	-55°C to 150°C	°C

ELECTRICAL CHARACTERISTICS PER LINE @ 25°C Unless Otherwise Specified						
PART NUMBER (See Note 1)	RATED STAND-OFF VOLTAGE  V <sub>WM</sub> VOLTS	MINIMUM BREAKDOWN VOLTAGE  @ 1mA V <sub>(BR)</sub> VOLTS	MAXIMUM CLAMPING VOLTAGE (See Note 2)  @ I <sub>p</sub> = 100A V <sub>C</sub> VOLTS	MAXIMUM CLAMPING VOLTAGE (See Note 3)  @ I <sub>p</sub> = 200A V <sub>C</sub>	MAXIMUM LEAKAGE CURRENT  @ V <sub>WM</sub> I <sub>b</sub> µA	TYPICAL CAPACITANCE  @ 0V, 1 MHz C pF
PLC01-6	6.0	8.0	15.0	16.0	25	50

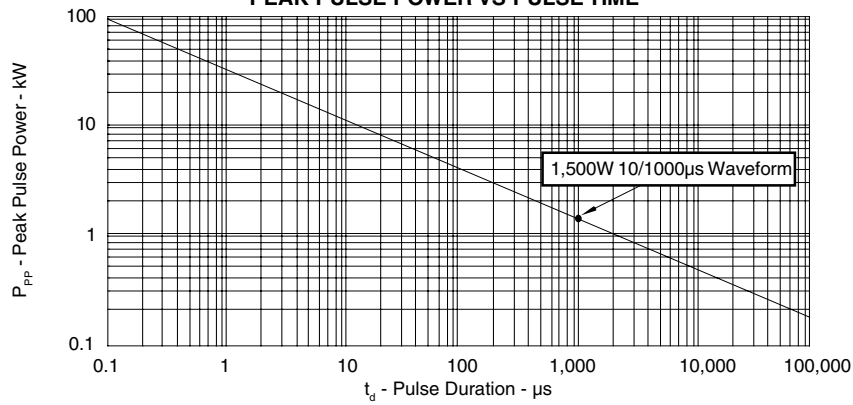
**Note 1:** Electrical characteristics apply from pins 13-16 to 1-4 and 5-8 to 9-12; see circuit diagram.

**Note 2:** V<sub>C</sub> tested at 10/1000µs impulse waveform.

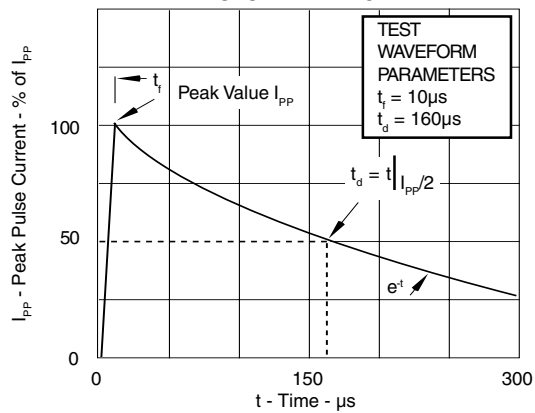
**Note 3:** 10/160µs impulse waveform per FCC Part 68.

GRAPHS

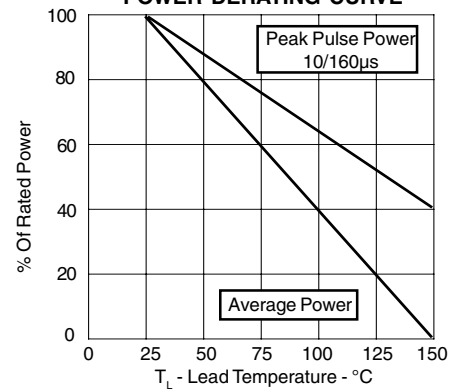
**FIGURE 1  
PEAK PULSE POWER VS PULSE TIME**



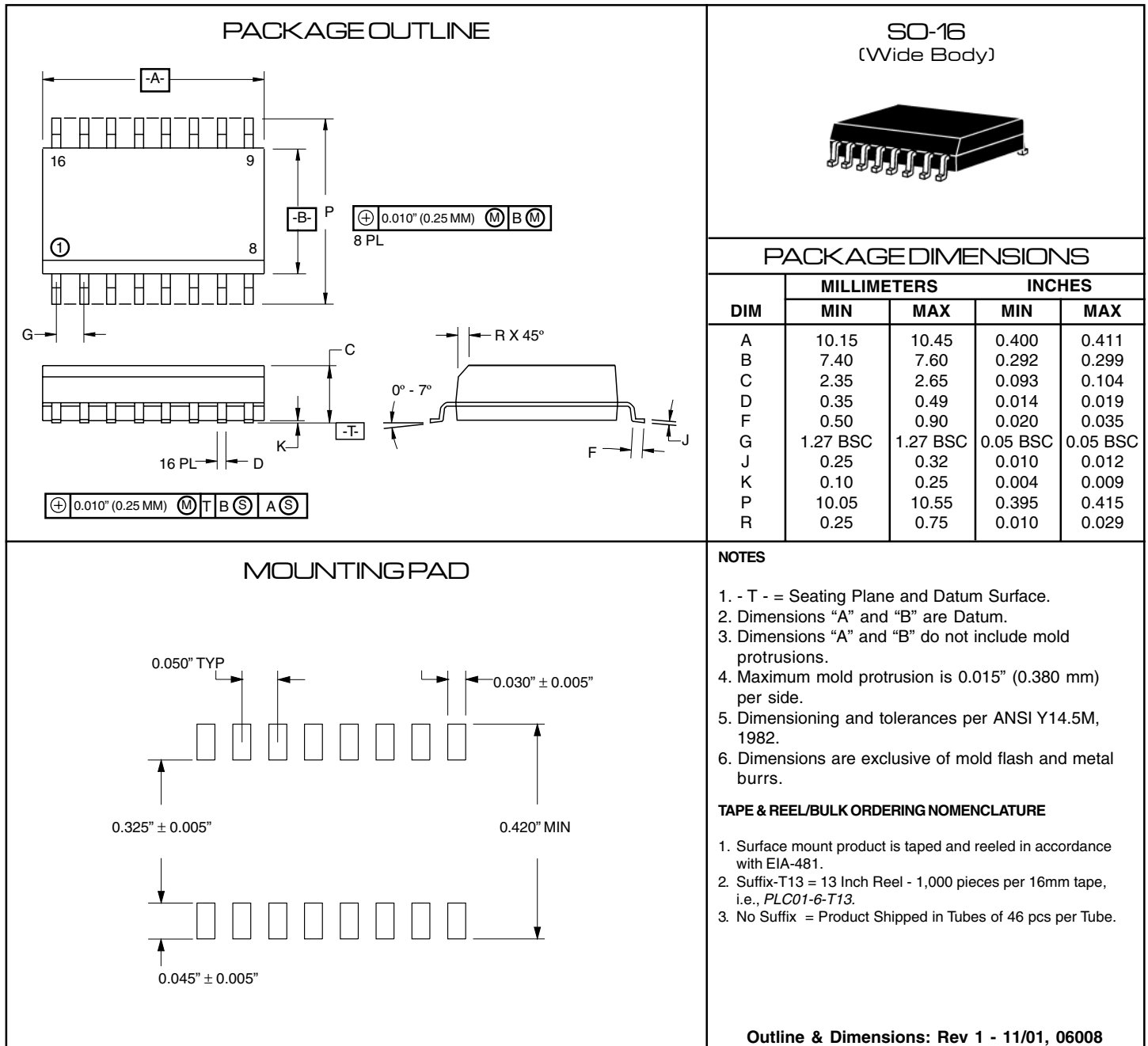
**FIGURE 2  
PULSE WAVE FORM**



**FIGURE 3  
POWER DERATING CURVE**



## PACKAGE OUTLINE & DIMENSIONS



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