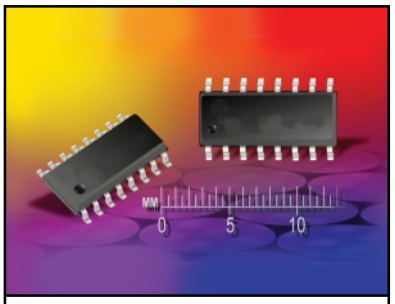
PROTEK DEVICES
Only One Name Means ProTek'Tion™

PLC01-6

LOW CAPACITANCE TVS ARRAY

APPLICATIONS



SO-16
(Wide Body)

- ✔ 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, 8/20µs, L3(Line-Gnd), L4(Line-Line) & L1(Power)

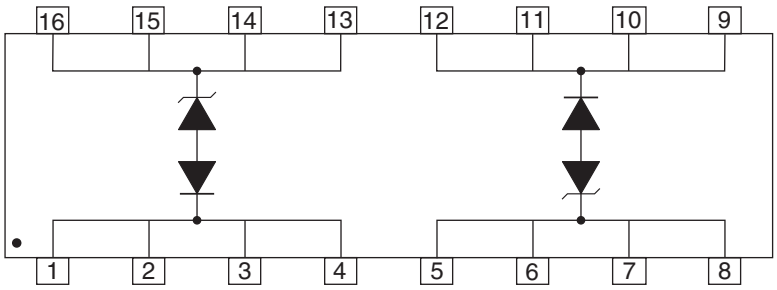
FEATURES

- ✔ ***ESD PROTECTION > 40 kilovolts***
- ✔ 1,500 Watts Peak Pulse Power per Line (tp=10/1000µs)
- ✔ Low Clamping Voltage
- ✔ 100A (10/1000µs) per Bellcore 1089(Intra-Building)
- ✔ 200A (10/160µs) 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_{PP}	1,500	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)	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	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 10/1000µs impulse waveform.
Note 3: 10/160µs impulse waveform per FCC Part 68.

GRAPHS

FIGURE 1
PEAK PULSE POWER VS PULSE TIME

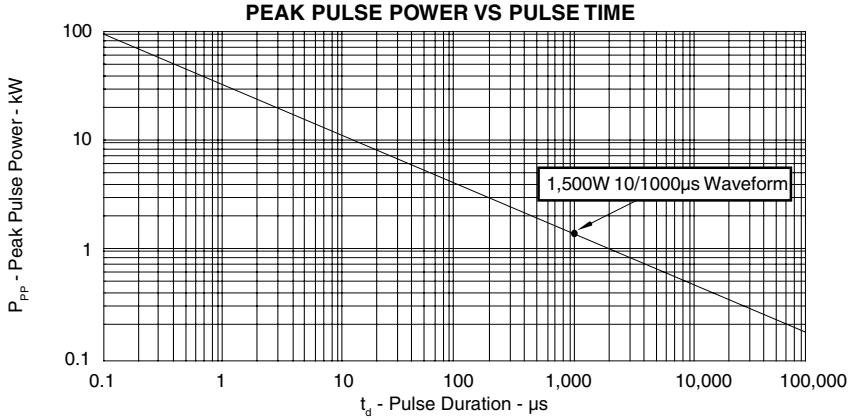


FIGURE 2
PULSE WAVE FORM

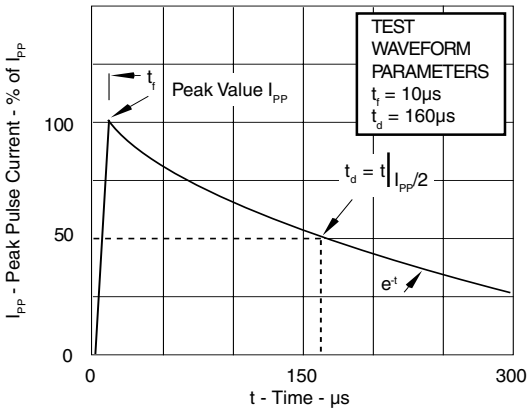
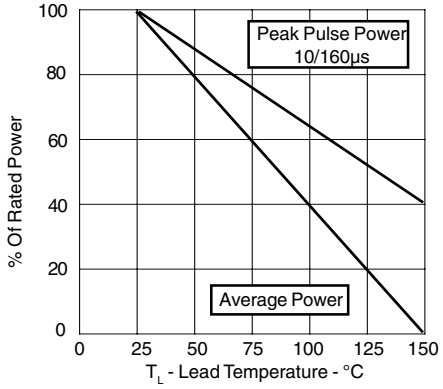
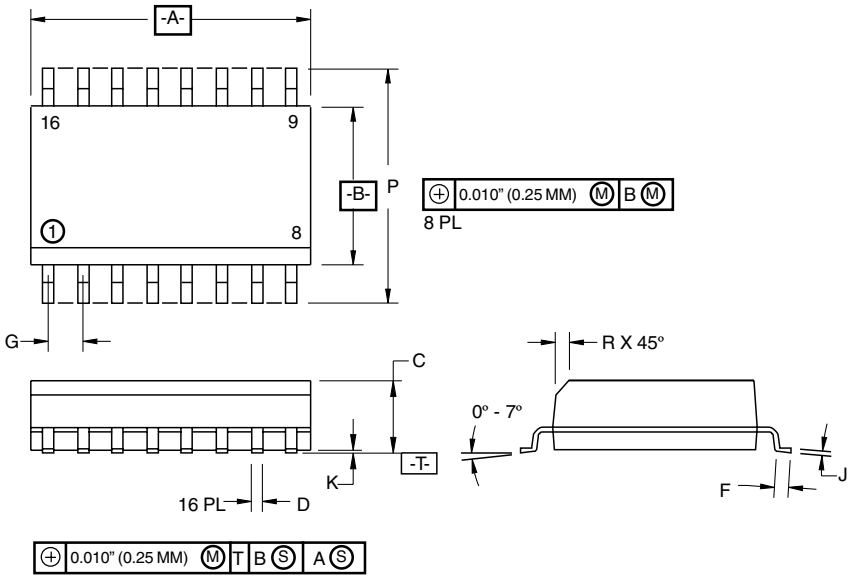


FIGURE 3
POWER DERATING CURVE

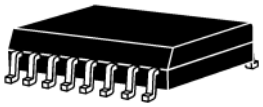


PACKAGE OUTLINE & DIMENSIONS

PACKAGE OUTLINE



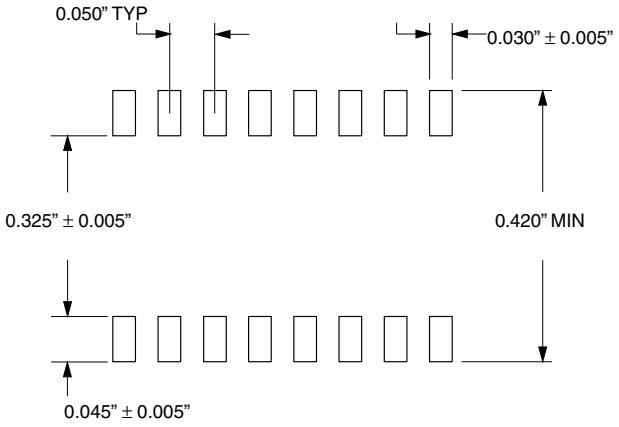
SO-16
(Wide Body)



PACKAGE DIMENSIONS

DIM	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	10.15	10.45	0.400	0.411
B	7.40	7.60	0.292	0.299
C	2.35	2.65	0.093	0.104
D	0.35	0.49	0.014	0.019
F	0.50	0.90	0.020	0.035
G	1.27 BSC	1.27 BSC	0.05 BSC	0.05 BSC
J	0.25	0.32	0.010	0.012
K	0.10	0.25	0.004	0.009
P	10.05	10.55	0.395	0.415
R	0.25	0.75	0.010	0.029

MOUNTING PAD



NOTES

1. - T - = Seating Plane and Datum Surface.
2. Dimensions “A” and “B” are Datum.
3. Dimensions “A” and “B” do not include mold protrusions.
4. Maximum mold protrusion is 0.015” (0.380 mm) per side.
5. Dimensioning and tolerances per ANSI Y14.5M, 1982.
6. Dimensions are exclusive of mold flash and metal burrs.

TAPE & REEL/BULK ORDERING NOMENCLATURE

1. Surface mount product is taped and reeled in accordance with EIA-481.
2. Suffix-T13 = 13 Inch Reel - 1,000 pieces per 16mm tape, i.e., *PLC01-6-T13.*
3. No Suffix = Product Shipped in Tubes of 46 pcs per Tube.

Outline & Dimensions: Rev 1 - 11/01, 06008

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