

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

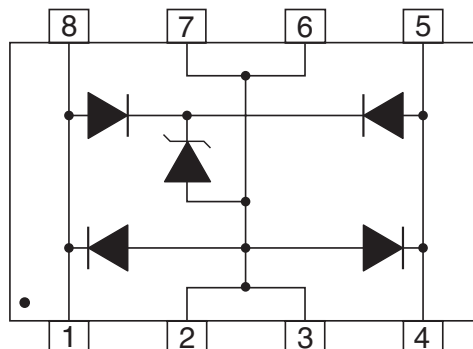
- ✓ 2000 Watts Peak Pulse Power per Line (tp=8/20 μ s)
- ✓ Protects Two (2) Lines
- ✓ 100A (2/10 μ s) per Bellcore GR-1089(Intra-Building)
- ✓ **ESD PROTECTION > 40 KILOVOLTS**
- ✓ **LOW CAPACITANCE: < 20pF**
- ✓ RoHS Compliant in Lead-Free Versions

MECHANICAL CHARACTERISTICS

- ✓ Molded JEDEC SO-8 Package
- ✓ Weight 70 milligrams (Approximate)
- ✓ Available in Tin-Lead or Lead-Free Pure-Tin Plating(Annealed)
- ✓ Solder Reflow Temperature:
 - Tin-Lead - Sn/Pb, 85/15: 240-245°C
 - Pure-Tin - Sn, 100: 260-270°C
- ✓ 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 ($t_p = 8/20\mu s$) - See Figure 1	P_{PP}	2000	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	DEVICE MARKING CODE	RATED STAND-OFF VOLTAGE	MINIMUM BREAKDOWN VOLTAGE	MAXIMUM CLAMPING VOLTAGE (See Notes 1-2) (See Fig. 2)	MAXIMUM LEAKAGE CURRENT	TYPICAL CAPACITANCE (See Note 3)	MAXIMUM CAPACITANCE (See Note 4)
		V_{WM} VOLTS	@ 1mA $V_{(BR)}$ VOLTS	@ 8/20 μs $V_C @ I_{PP}$	@ V_{WM} I_D μA	@ 0V, 1 MHz $C_{j(SD)}$ pF	@ 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 8/20 μs 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

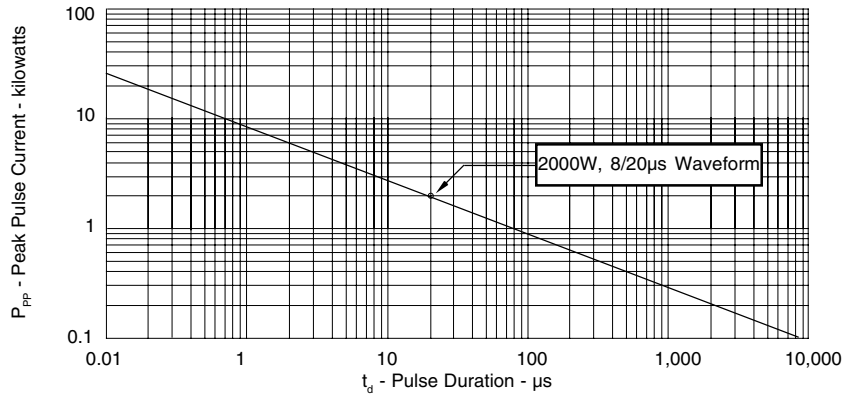


FIGURE 2
PULSE WAVE FORM

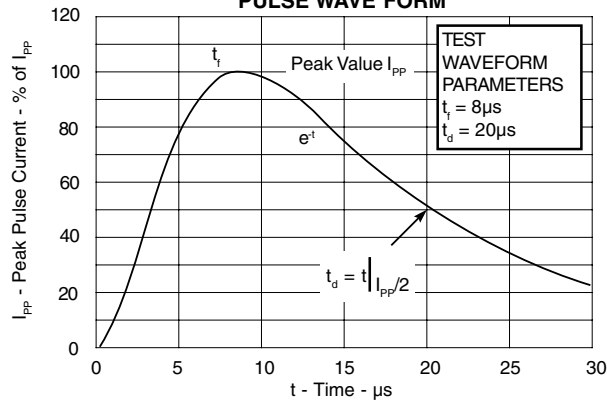
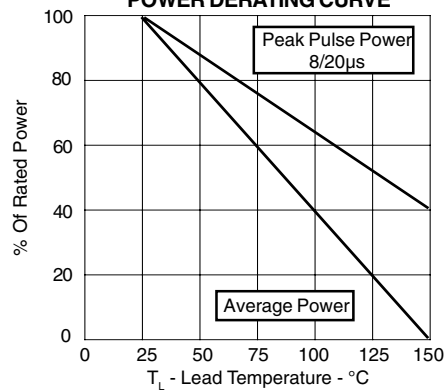


FIGURE 3
POWER DERATING CURVE



PACKAGE OUTLINE & DIMENSIONS

