

LOW CAPACITANCE TVS ARRAY

APPLICATIONS

- ✓ T1/E1 Line Cards
- ✓ ISDN U-Interfaces & ISDN S/T Interfaces
- ✓ xDSL Interfaces
- ✓ Ethernet - 10/100/1000 Base T
- ✓ Set-Top Box

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 - 94A, L4(Line-Gnd), 48A, L1(Power) & 48A, L4(Line-Line)

FEATURES

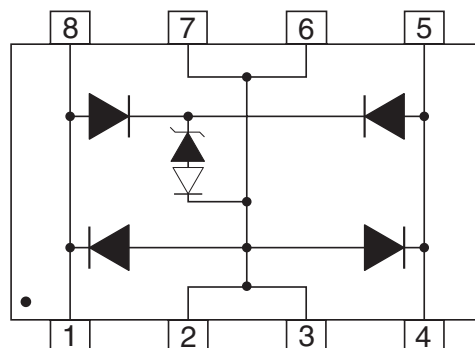
- ✓ 100A (2/10 μ s) per Bellcore GR1089(Intra-Building)
- ✓ ESD Protection > 40 kilovolts
- ✓ 1800 Watts Peak Pulse Power per Line (tp = 8/20 μ s)
- ✓ **LOW CAPACITANCE: 8pF Typical**
- ✓ Telecom/Diode Bridge
- ✓ RoHS Compliant on Lead Free Versions

MECHANICAL CHARACTERISTICS

- ✓ Molded JEDEC SO-8
- ✓ 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
- ✓ Weight 70mg(Approximate)
- ✓ Flammability Rating UL 94V-0
- ✓ 12mm Tape and Reel Per EIA Standard 481
- ✓ Marking: Marking Code, Logo, 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}	1800	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 SNAP-BACK VOLTAGE	MAXIMUM CLAMPING VOLTAGE (Note 1 & 2) (See Fig. 2)	MAXIMUM LEAKAGE CURRENT	MAXIMUM CAPACITANCE (See Note 3)	MAXIMUM CAPACITANCE (See Note 4)
		V_{WM} VOLTS	@ 50mA $V_{(BR)}$ VOLTS	@ 8/20 μs $V_C @ I_{PP}$	@ V_{WM} I_D μA	@ 0V, 1 MHz C pF	@ 0V, 1 MHz C pF
PLC03-3.3	PBC	3.0	2.8	18.0V @ 100.0A	2.0	25	12

<p>MAXIMUM CLAMPING VOLTAGE Line-Ground 8/20μs @ $I_p = 50A$ V_C VOLTS</p>
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Note 1: For an 8/20 μs waveform, apply positive pulse to pin 1 or 8 to pin 2 or 3(ground).

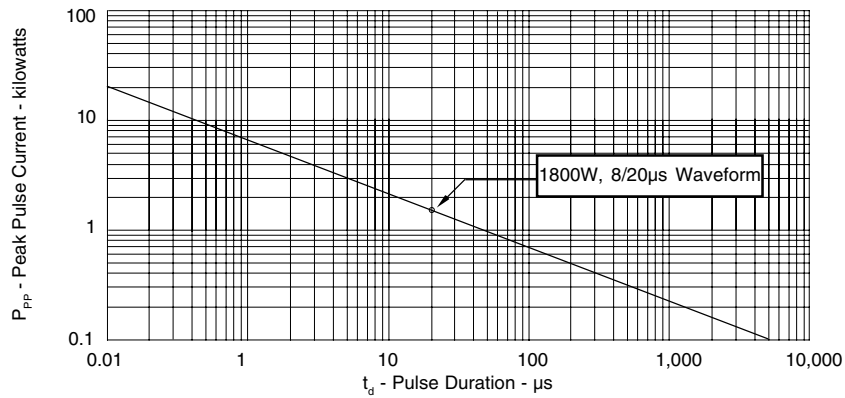
Note 2: Measured between pin 1 or 8 to pin 2 or 3.

Note 3: Measured between I/O pins and ground (pin 1 to 2).

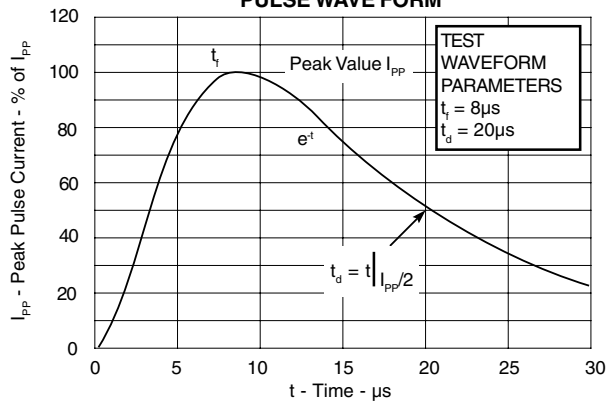
Note 4: Measured between I/O pins (pins 1 to 4).

GRAPHS

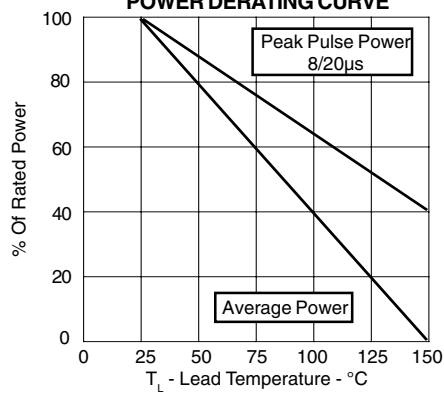
**FIGURE 1
PEAK PULSE POWER VS PULSE TIME**



**FIGURE 2
PULSE WAVE FORM**



**FIGURE 3
POWER DERATING CURVE**



PACKAGE OUTLINE & DIMENSIONS

