

## STEERING DIODE ARRAY

## APPLICATIONS

- ✓ Ethernet - 10/100/1000 Base T
- ✓ RS-422 & RS-485
- ✓ Microcontrollers
- ✓ USB Interface

## IEC COMPATIBILITY (EN61000-4)

- ✓ 61000-4-2 (ESD): Air - 15kV, Contact - 8kV
- ✓ 61000-4-4 (EFT): 40A - 5/50ns
- ✓ 61000-4-5 (Surge): 12A, 8/20 $\mu$ s - Level 1(Line-Gnd) & Level 2(Line-Line)

## FEATURES

- ✓ ESD Protection > 40 kilovolts
- ✓ Provides Six (6) Lines of Protection
- ✓ Low Leakage Current < 2.0 $\mu$ A
- ✓ Low Capacitance: 6pF per Diode
- ✓ RoHS Compliant

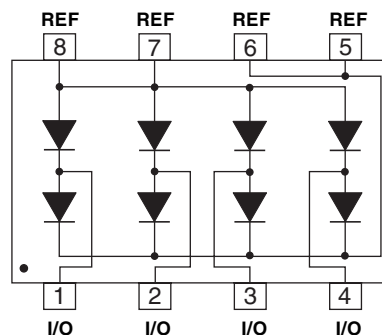
## MECHANICAL CHARACTERISTICS

- ✓ Molded JEDEC SO-8
- ✓ Weight 70 milligrams (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
- ✓ 12mm Tape and Reel Per EIA Standard 481
- ✓ Marking: Part Number, Logo, Date Code & Pin One Defined By Dot on Top of Package



SO-8

## PIN CONFIGURATION



## DEVICE CHARACTERISTICS

### MAXIMUM RATINGS @ 25°C Unless Otherwise Specified

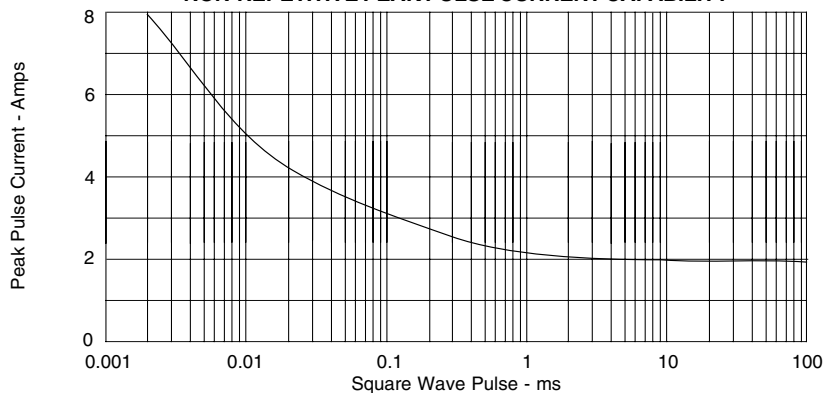
PARAMETER	SYMBOL	VALUE	UNITS
Operating Temperature	$T_A$	-55 to 150	°C
Storage Temperature	$T_{STG}$	-55 to 150	°C
Continuous Power Dissipation	$P_{PC}$	730	mW

### ELECTRICAL CHARACTERISTICS PER LINE @ 25°C Unless Otherwise Specified

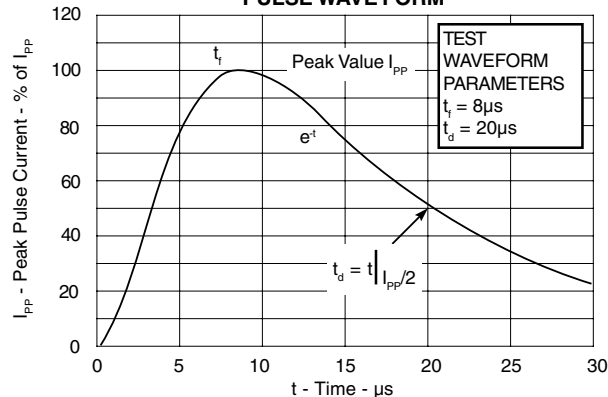
PART NUMBER	DEVICE MARKING CODE	REPETITIVE PEAK REVERSE VOLTAGE $V_{RRM}$ VOLTS	MAXIMUM FORWARD VOLTAGE 8/20µs @ 50mA $V_F$ VOLTS	MAXIMUM PEAK PULSE FORWARD CURRENT (See Fig. 2) 8/20µs $I_{FM}$ AMPS	MAXIMUM FORWARD VOLTAGE @ 12A $V_F$ VOLTS	MAXIMUM REVERSE LEAKAGE CURRENT @ $V_{RRM}$ $I_R$ µA	TYPICAL CAPACITANCE (See Note 1) $C_j$ pF
ET108	ET108	25	1.2	12	9	2	6

**Note 1:** Apply a 5V bias between pin 5 (REF 2) to pin 7 (REF 1). Measure  $C_j$  between any I/O pins to pin 7 (REF 1) and divide by 2.

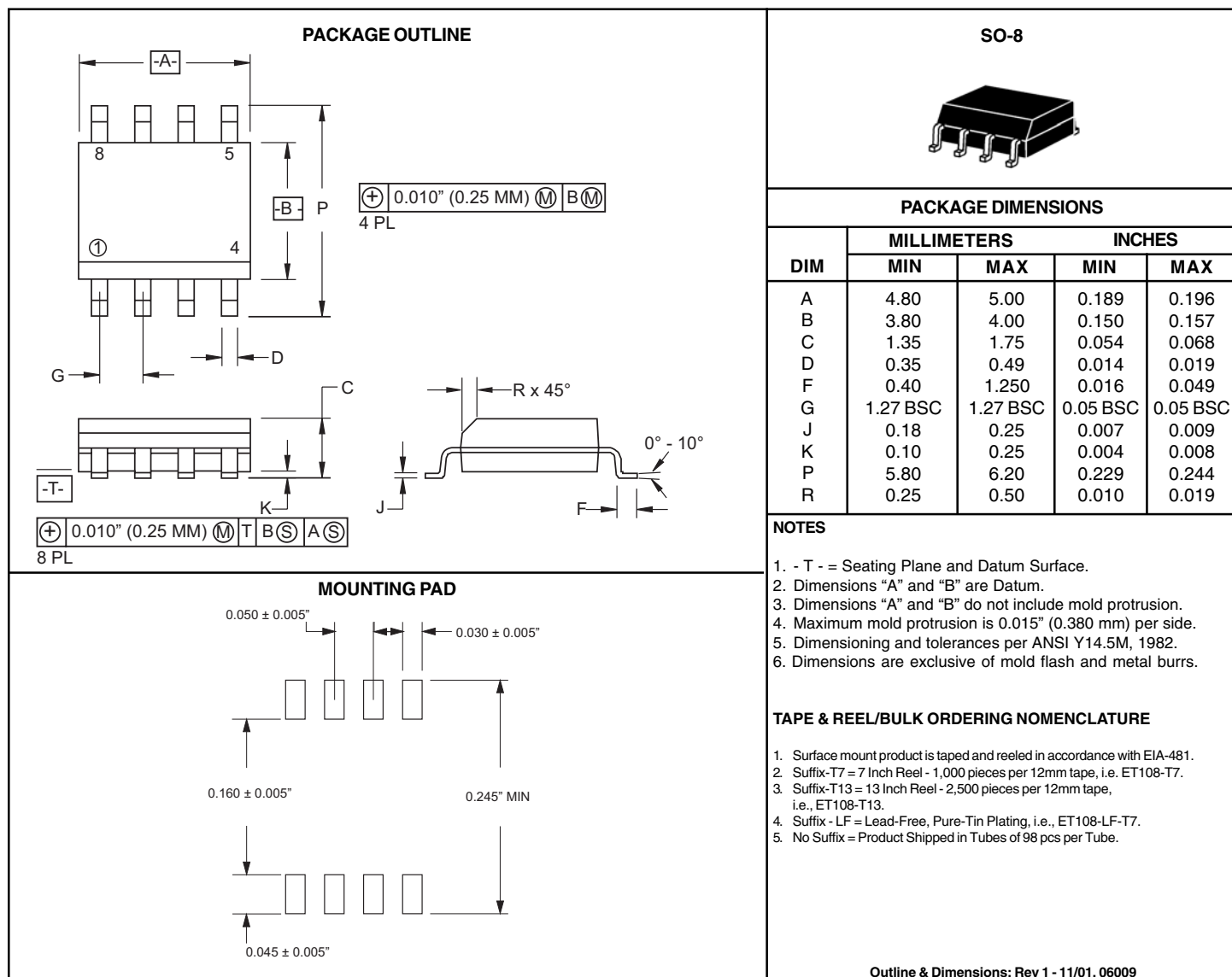
**FIGURE 1**  
NON-REPETITIVE PEAK PULSE CURRENT CAPABILITY



**FIGURE 2**  
PULSE WAVE FORM



## SO-8 PACKAGE OUTLINE & DIMENSIONS



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