

**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**

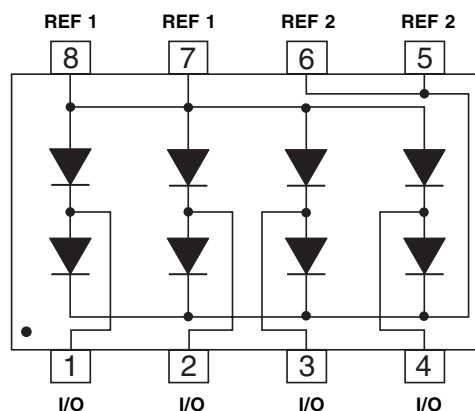
- ✓ ESD Protection > 40 kilovolts
- ✓ Provides Six (6) Lines of Protection
- ✓ **LOW LEAKAGE CURRENT < 2.0  $\mu$ A**
- ✓ **LOW CAPACITANCE: 6pF Per Diode**
- ✓ RoHS Compliant in Lead-Free Versions

**MECHANICAL CHARACTERISTICS**

- ✓ Molded JEDEC SO-8
- ✓ 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: Part Number, Logo, Date Code & Pin One Defined By Dot on Top of Package



SO-8

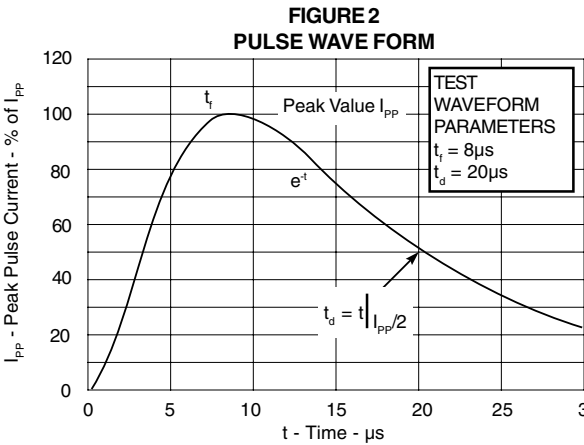
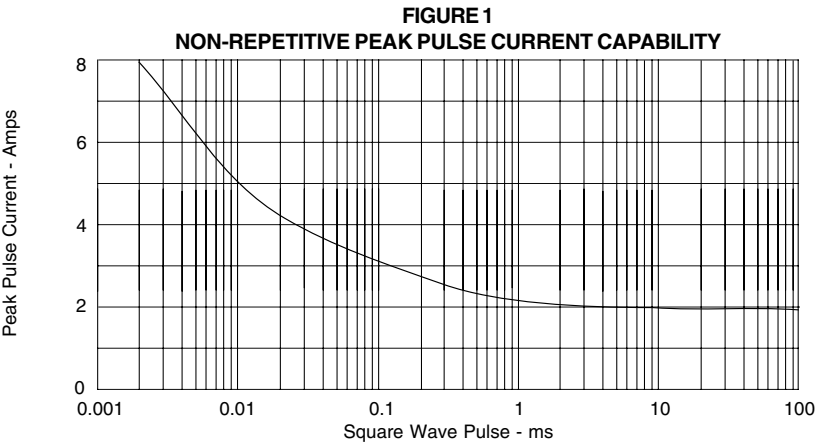
**PIN CONFIGURATION**

DEVICE CHARACTERISTICS

MAXIMUM RATINGS @ 25°C Unless Otherwise Specified			
PARAMETER	SYMBOL	VALUE	UNITS
Operating Temperature	$T_J$	-55°C to 150°C	°C
Storage Temperature	$T_{STG}$	-55°C to 150°C	°C
Continuous Power Dissipation	$P_{PC}$	730	mW

ELECTRICAL CHARACTERISTICS PER LINE @ 25°C Unless Otherwise Specified							
PART NUMBER	DEVICE MARKING	REPETITIVE PEAK REVERSE VOLTAGE	MAXIMUM FORWARD VOLTAGE	MAXIMUM PEAK PULSE FORWARD CURRENT (See Fig. 2)	MAXIMUM FORWARD VOLTAGE	MAXIMUM REVERSE LEAKAGE CURRENT	TYPICAL CAPACITANCE (See Note 1)
		$V_{RRM}$ VOLTS	8/20µs @50mA $V_F$ VOLTS	8/20µs $I_{FM}$ AMPS	8/20µs @12A $V_F$ VOLTS	@ $V_{RRM}$ $I_R$ µA	$C_j$ 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.



**PACKAGE OUTLINE & DIMENSIONS**

**PACKAGE OUTLINE**

**MOUNTING PAD**

**SO-8**

**PACKAGE DIMENSIONS**

DIM	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	4.80	5.00	0.189	0.196
B	3.80	4.00	0.150	0.157
C	1.35	1.75	0.054	0.068
D	0.35	0.49	0.014	0.019
F	0.40	1.250	0.016	0.049
G	1.27 BSC	1.27 BSC	0.05 BSC	0.05 BSC
J	0.18	0.25	0.007	0.009
K	0.10	0.25	0.004	0.008
P	5.80	6.20	0.229	0.244
R	0.25	0.50	0.010	0.019

**NOTES**

1. - T - = Seating Plane and Datum Surface.
2. Dimensions "A" and "B" are Datum.
3. Dimensions "A" and "B" do not include mold protrusion.
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-T7 = 7 Inch Reel - 1,000 pieces per 12mm tape, i.e., *ET108-T7*.
3. Suffix-T13 = 13 Inch Reel - 2,500 pieces per 12mm tape, i.e., *ET108-T13*.
4. Suffix - LF = Lead-Free, Pure-Tin Plating, i.e., *ET108-LF-T7*.
5. No Suffix = Product Shipped in Tubes of 98 pcs per Tube.

**Outline & Dimensions: Rev 1 - 11/01, 06009**

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