

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 μ s - Level 1(Line-Gnd) & Level 2(Line-Line)

FEATURES

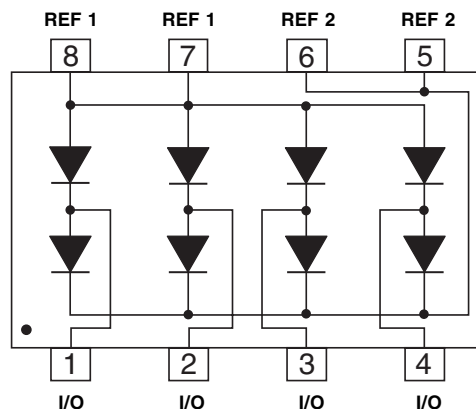
- ✓ ESD Protection > 40 kilovolts
- ✓ Provides Six (6) Lines of Protection
- ✓ **LOW LEAKAGE CURRENT < 2.0 μ A**
- ✓ **LOW CAPACITANCE: 6pF Per Diode**
- ✓ RoHS Compliant in Lead-Free Versions

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

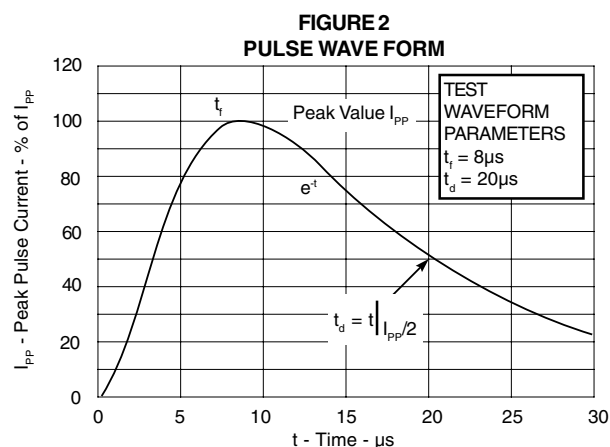
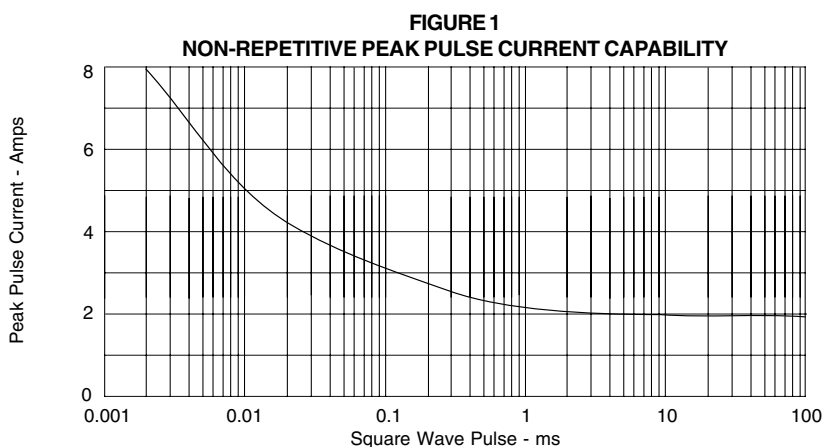
PIN CONFIGURATION

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 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 8/20µs @12A V_F VOLTS	MAXIMUM REVERSE LEAKAGE CURRENT @ V_{RRM} I_R µA	TYPICAL CAPACITANCE (See Note 1) Cj 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

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

TAPE & REEL/BULK ORDERING NOMENCLATURE

- Surface mount product is taped and reeled in accordance with EIA-481.
- Suffix-T7 = 7 Inch Reel - 1,000 pieces per 12mm tape, i.e., *ET108-T7*.
- Suffix-T13 = 13 Inch Reel - 2,500 pieces per 12mm tape, i.e., *ET108-T13*.
- Suffix - LF = Lead-Free, Pure-Tin Plating, i.e., *ET108-LF-T7*.
- No Suffix = Product Shipped in Tubes of 98 pcs per Tube.

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

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