

## STEERING DIODE ARRAY

## APPLICATIONS

- ✓ Ethernet - 10/100/1000 Base T
- ✓ Cellular Phones
- ✓ Handheld Electronics
- ✓ FireWire
- ✓ 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-Ground) & Level 2 (Line-Line)

## FEATURES

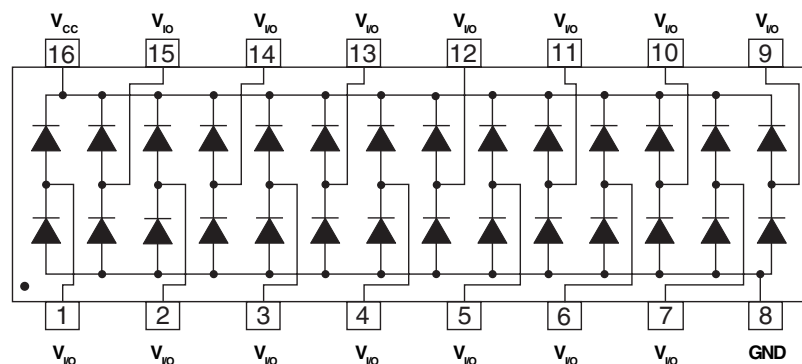
- ✓ ESD Protection > 40 kilovolts
- ✓ Provides 14 Lines of Protection
- ✓ Low Leakage Current < 20nA
- ✓ Ultra Low Capacitance: 3pF Typical
- ✓ RoHS Compliant

## MECHANICAL CHARACTERISTICS

- ✓ Molded JEDEC SO-16 Package
- ✓ Weight 0.15 grams (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
- ✓ 16mm Tape and Reel per EIA Standard 481
- ✓ Marking: Logo, Part Number, 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
Operating Temperature	$T_A$	-55 to 150	°C
Storage Temperature	$T_{STG}$	-55 to 150	°C
Continuous Power Dissipation	$P_{PC}$	145	mW

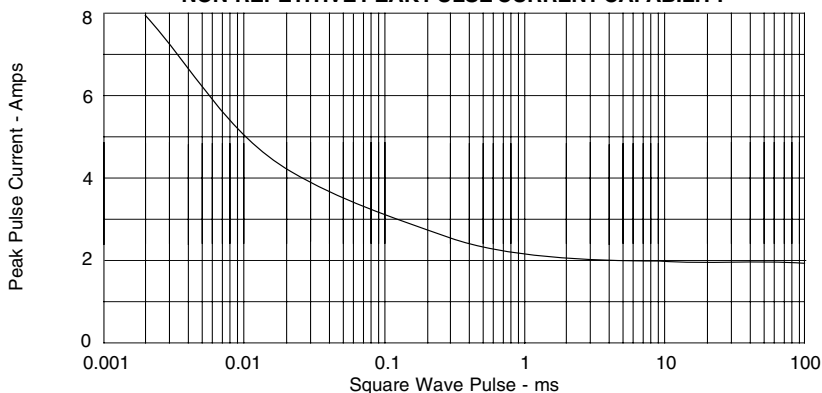
### ELECTRICAL CHARACTERISTICS PER LINE @ 25°C Unless Otherwise Specified

PART NUMBER	DEVICE MARKING	REPETITIVE PEAK REVERSE VOLTAGE (See Note 1) $V_{RRM}$ VOLTS	TYPICAL FORWARD VOLTAGE 8/20 $\mu$ s @ 1A $V_F$ VOLTS	MAXIMUM PEAK PULSE FORWARD CURRENT 8/20 $\mu$ s $I_{FM}$ AMPS	MAXIMUM REVERSE LEAKAGE CURRENT $V_{RRM}$ @ 20V $I_R$ nA	MAXIMUM QUIESCENT SUPPLY CURRENT @ 20V $I_{RQ}$ nA	TYPICAL CAPACITANCE (See Note 2) @ 0V, 1MHz $C_j$ pF
ET720	ET720	30	2	12	20	200	3

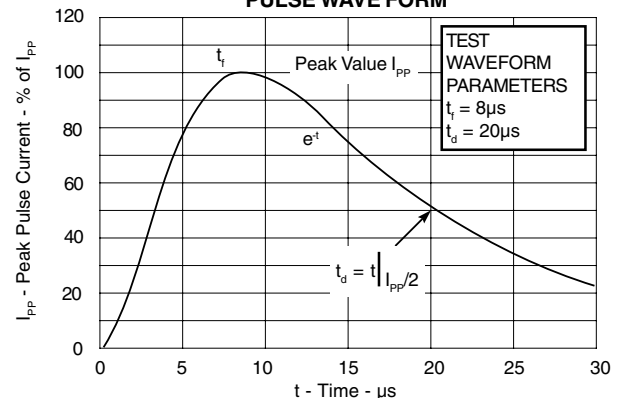
**Note 1:**  $V_{RRM}$  is  $+V_{CC}$  for pin 16,  $-V_{EE}$  for pin 1.

**Note 2:** Measure  $C_j$  between any  $V_{IO}$  pins to ground and divide by 2.

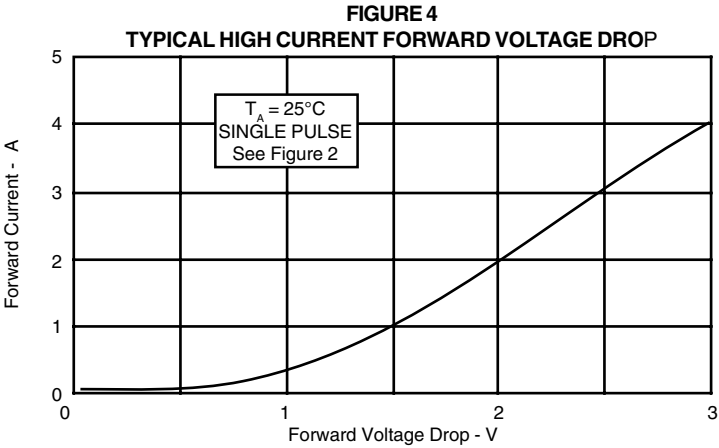
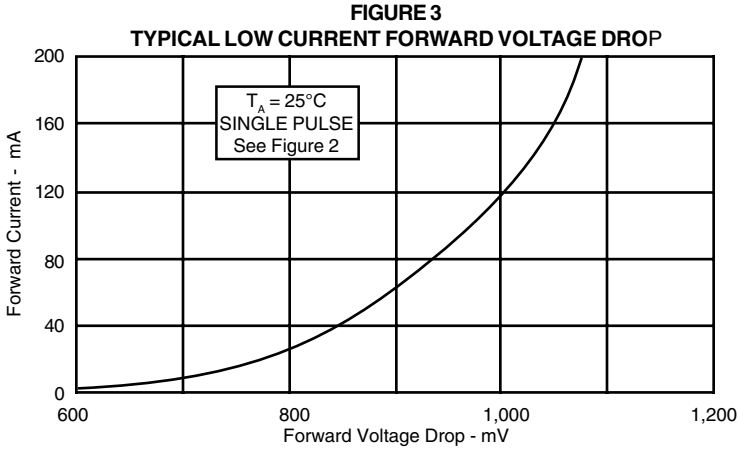
**FIGURE 1**  
NON-REPETITIVE PEAK PULSE CURRENT CAPABILITY



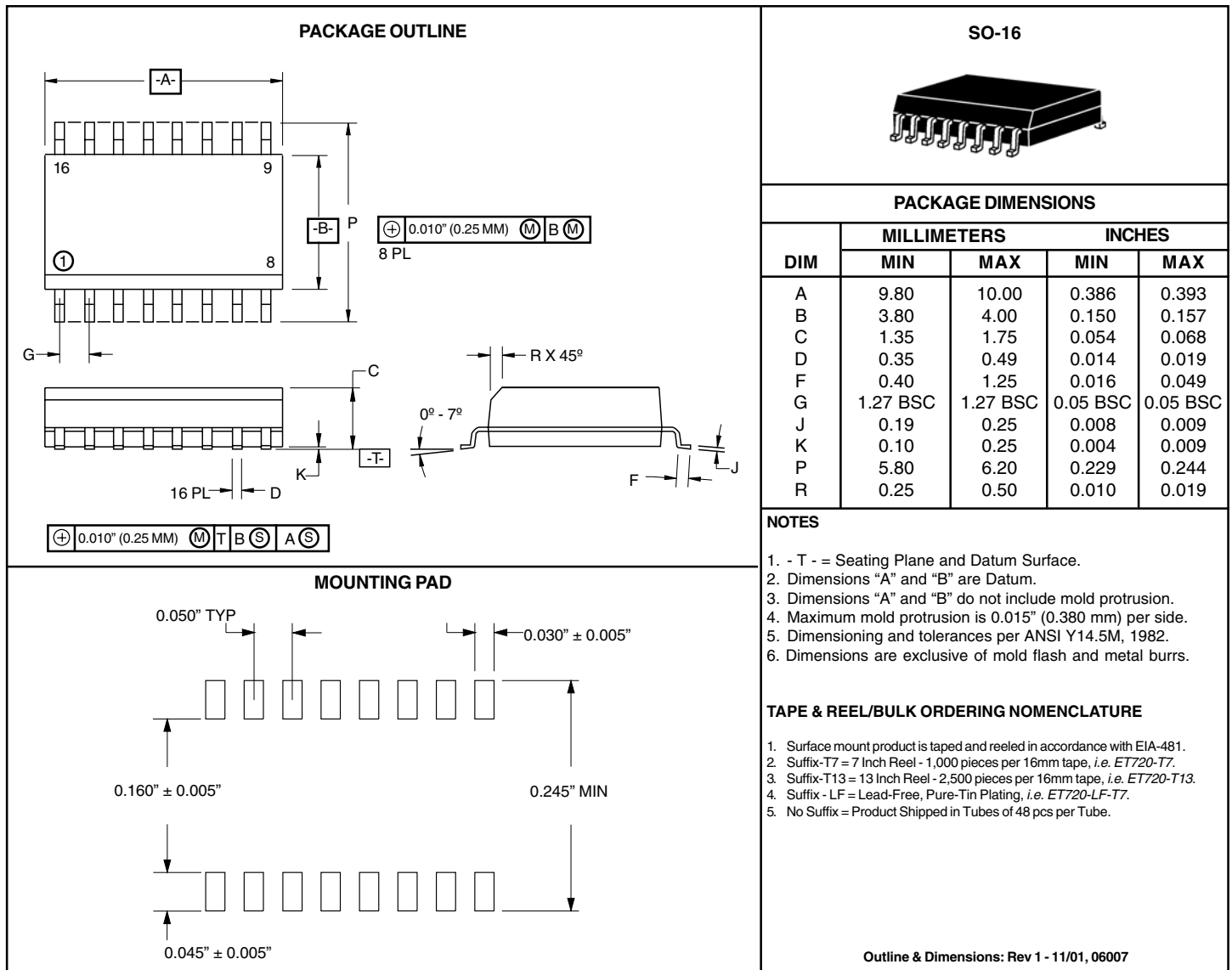
**FIGURE 2**  
PULSE WAVE FORM



GRAPHS



## SO-16 PACKAGE OUTLINE & DIMENSIONS



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