

## STEERING DIODE ARRAY

## APPLICATIONS

- ✓ Ethernet - 10/100/1000 Base T
- ✓ Set Top Box Interfac
- ✓ Handheld Electronics
- ✓ FireWire
- ✓ USB Interface
- ✓ Sensor 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
- ✓ Low Clamping Voltage
- ✓ Provides Six (6) Lines of Protection
- ✓ Low Leakage Current < 200nA
- ✓ Low Capacitance: 3pF Typical
- ✓ RoHS Compliant

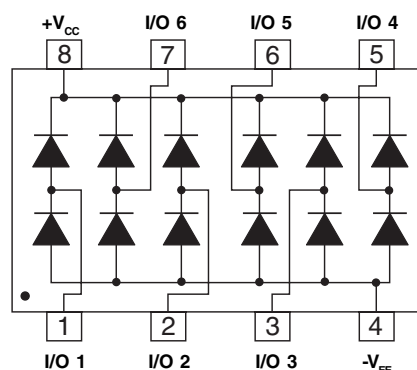
## MECHANICAL CHARACTERISTICS

- ✓ 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: Marking Code, 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	$P_{PC}$	145	mW

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

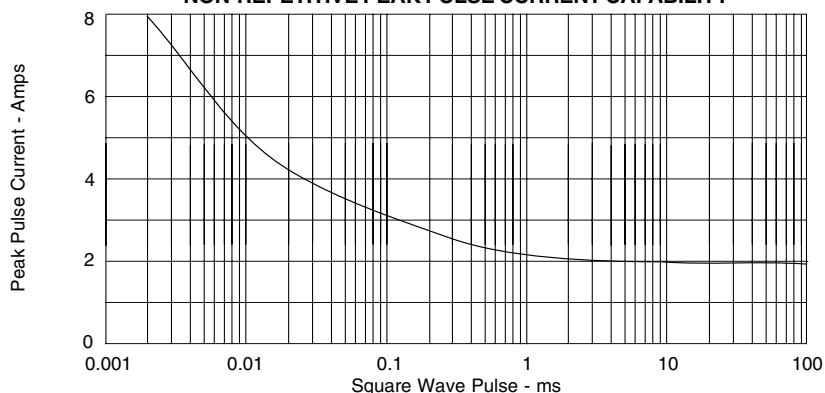
PART NUMBER	DEVICE MARKING	REPETITIVE PEAK REVERSE VOLTAGE (See Note 1) $V_{RRM}$ VOLTS	TYPICAL FORWARD VOLTAGE 8/20µs @ 1A $V_F$ VOLTS	MAXIMUM PEAK PULSE FORWARD CURRENT 8/20µs $I_{FM}$ AMPS	MAXIMUM REVERSE LEAKAGE CURRENT (See Note 2) @ $V_{RRM}$ $I_R$ nA	MAXIMUM QUIESCENT SUPPLY CURRENT (See Note 3) @ 20V $I_{RO}$ nA	TYPICAL CAPACITANCE @ 0V, 1MHz $C_j$ pF
ET721	STA	50	2	12	20	200	3

**Note 1:**  $V_{RRM}$  is  $+V_{CC}$  for pin 8,  $-V_{EE}$  for pin 4.

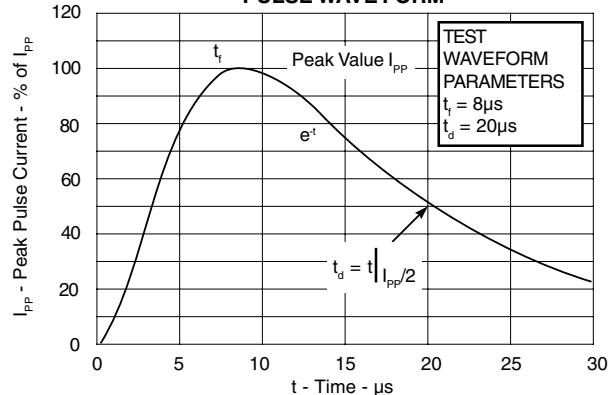
**Note 2:** +20V from pin 8 to 1, 2, 3, 5, 6, and 7. -20V from pin 4 to 1, 2, 3, 5, 6 and 7.

**Note 3:** +20V from pin 8 to 4.

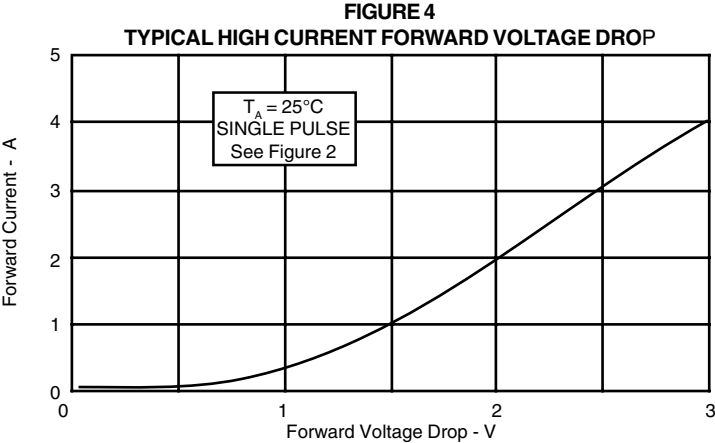
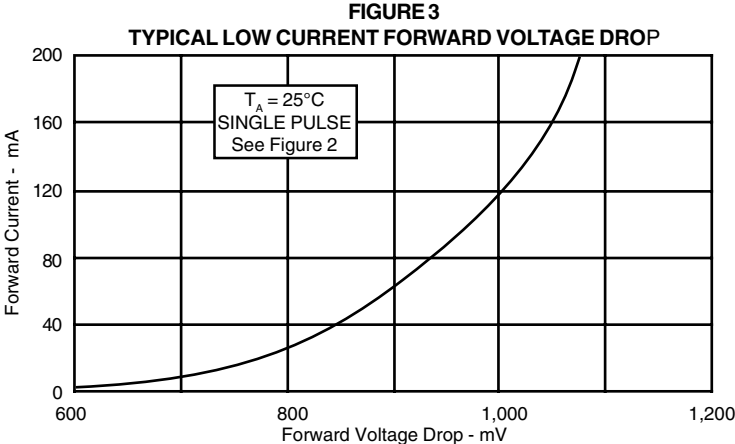
**FIGURE 1**  
NON-REPETITIVE PEAK PULSE CURRENT CAPABILITY



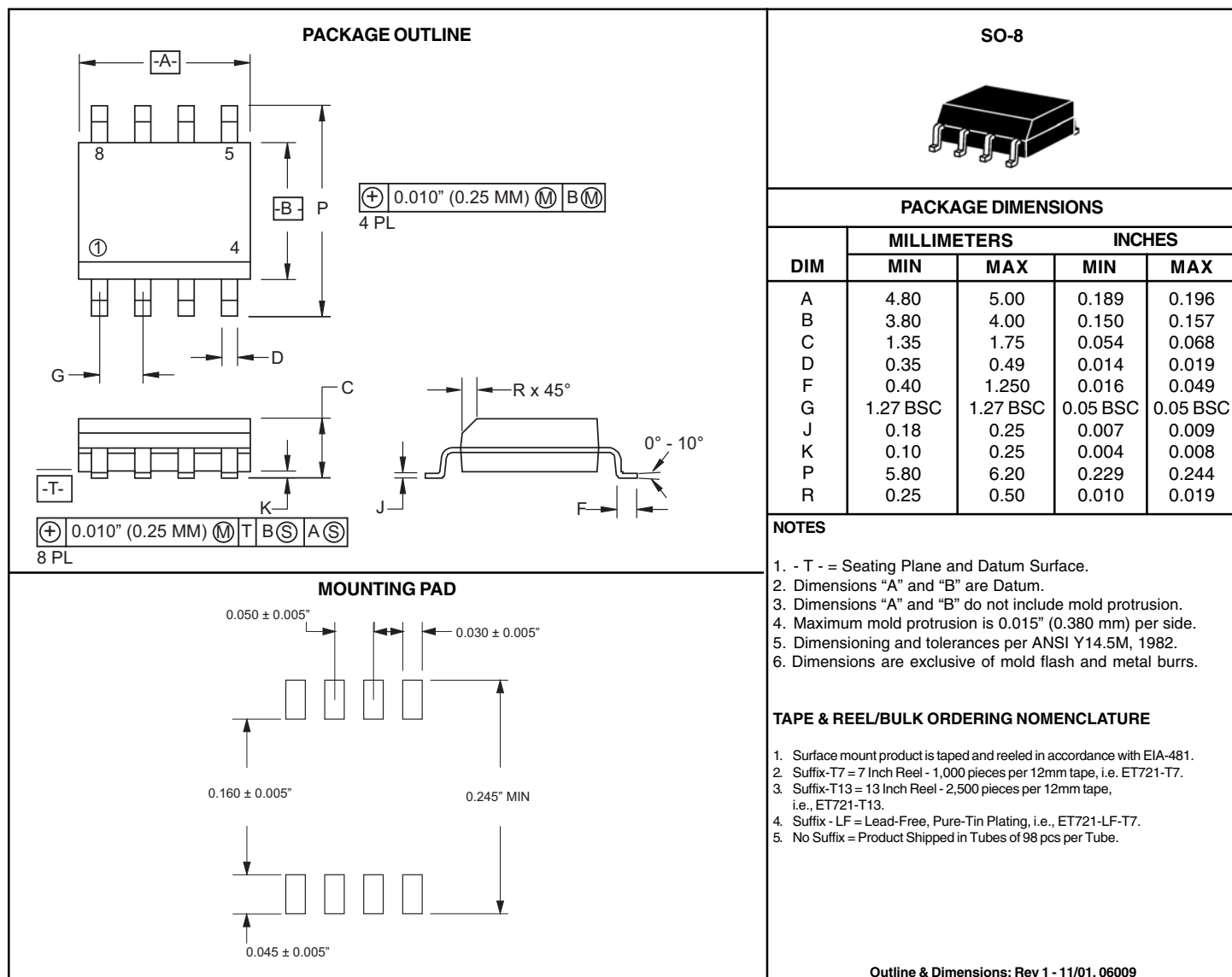
**FIGURE 2**  
PULSE WAVE FORM



GRAPHS



## SO-8 PACKAGE OUTLINE & DIMENSIONS



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**ProTek Devices**  
 2929 South Fair Lane, Tempe, AZ 85282  
 Tel: 602-431-8101 Fax: 602-431-2288  
 E-Mail: [sales@protekdevices.com](mailto:sales@protekdevices.com)  
 Web Site: [www.protekdevices.com](http://www.protekdevices.com)