

ULTRA LOW CAPACITANCE STEERING DIODE ARRAY

APPLICATIONS

- ✓ Ethernet - 10/100/1000 Base T
- ✓ Cellular Phones
- ✓ Handheld Electronics
- ✓ FireWire
- ✓ USB Interface

IEC COMPATIBILITY (EN61000-4)

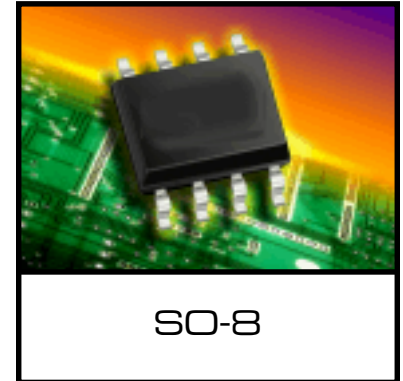
- ✓ 61000-4-2 (ESD): Air - 15kV, Contact - 8kV
- ✓ 61000-4-4 (EFT): 40A - 5/50ns
- ✓ 61000-4-5 (Surge): 12A, 8/20 μ s - Level 1(Line-Gnd) & Level 2(Line-Line)

FEATURES

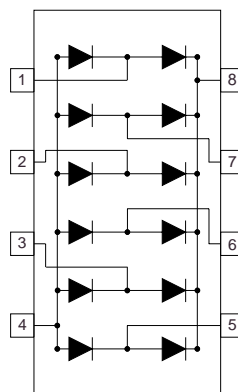
- ✓ ESD Protection > 40 kilovolts
- ✓ Low Clamping Voltage
- ✓ **LOW STANDBY CURRENT < 200nA**
- ✓ **ULTRA LOW CAPACITANCE 3pF PER DIODE**

MECHANICAL CHARACTERISTICS

- ✓ Molded JEDEC SO-8
- ✓ Weight 0.6 grams (Approximate)
- ✓ Flammability Rating UL 94V-0
- ✓ 12mm Tape and Reel Per EIA Standard 481-1-A
- ✓ Device Marking: Part Number, Logo & Pin One Defined By DOT on Top of Package



CIRCUIT DIAGRAM



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}	145	mW

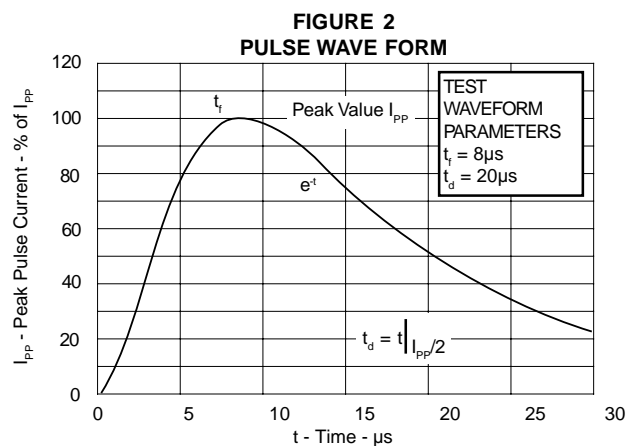
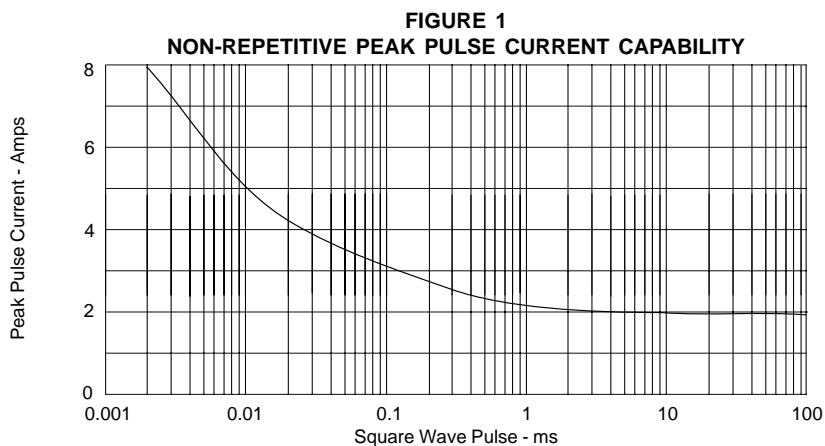
ELECTRICAL CHARACTERISTICS PER LINE @ 25°C Unless Otherwise Specified							
PART NUMBER (See Note 1)	DEVICE MARKING	MAXIMUM OPERATING VOLTAGE (See Note 2)	TYPICAL FORWARD VOLTAGE $I @ 1A, 8/20\mu s$ V_F VOLTS	MAXIMUM FORWARD CURRENT $8/20\mu s$ I_{FM} AMPS	MAXIMUM LEAKAGE CURRENT (See Note 3) @20V I_N nA	MAXIMUM QUIESCENT SUPPLY CURRENT (See Note 4) @20V I_{RQ} nA	TYPICAL CAPACITANCE 0V @ 1 MHz C pF
ET721	ET721	20	2	12	20	200	3

Note 1: Spice Model and parameters for this device are available on the ProTek Devices website: www.protekdevices.com.

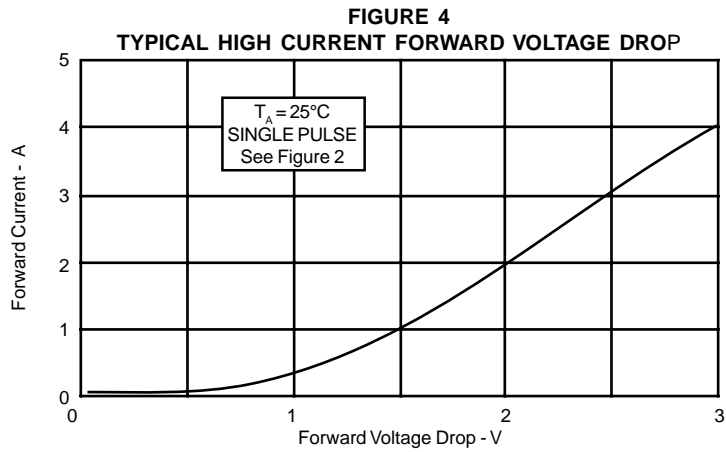
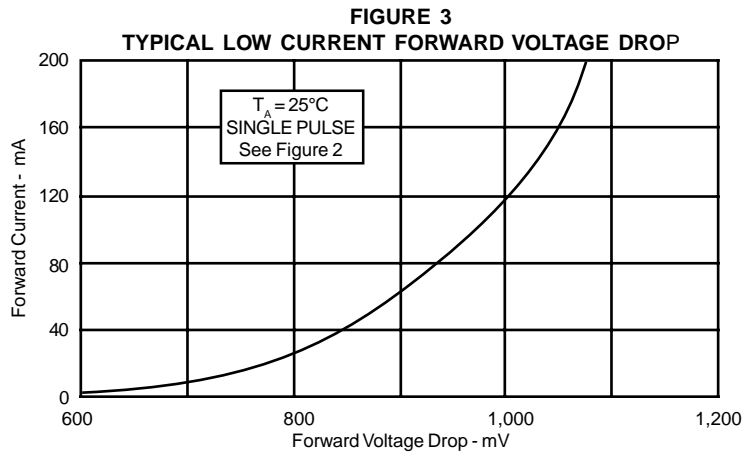
Note 2: V_{SUPPLY} is $+V_{CC}$ for pin 8, $-V_{EE}$ for pin 2.

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

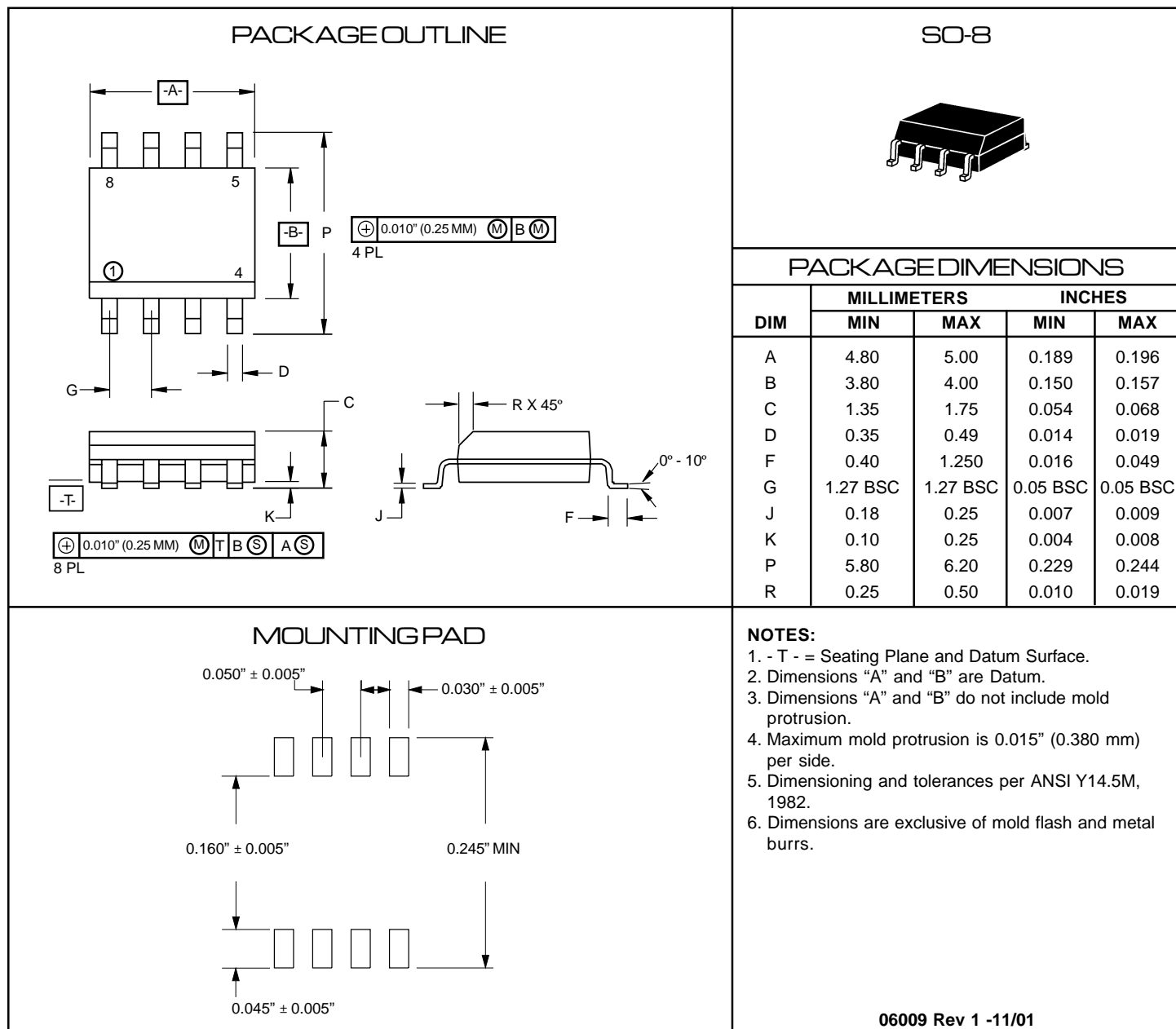
Note 4: +20v from pin 8 to 4.



GRAPHS



PACKAGE OUTLINE & DIMENSIONS



TAPE & REEL PACKAGING:

Surface mount product is taped and reeled in accordance with EIA-481, reel quantities and sizes are as follows:

7 Inch Reel - 1,000 pieces per reel; 13 Inch Reel - 2,500 pieces per reel

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DESIGN CHANGES: ProTek reserves the right to discontinue product lines without notice, and that the final judgement concerning selection and specifications is the buyer's and that in furnishing engineering and technical assistance, ProTek assumes no responsibility with respect to the selection or specifications of such products.

ProTek Devices

2929 South Fair Lane, Tempe, AZ 85282

Tel: 602-431-8101 Fax: 602-431-2288

E-Mail: sales@protekdevices.com

Web Site: www.protekdevices.com