PROTEK DEVICES
Only One Name Means ProTek'Tion™

ET723

STEERING DIODE ARRAY

APPLICATIONS



SO-8

- ✔ 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, 8/20µs - Level 1(Line-Gnd) & Level 2(Line-Line)

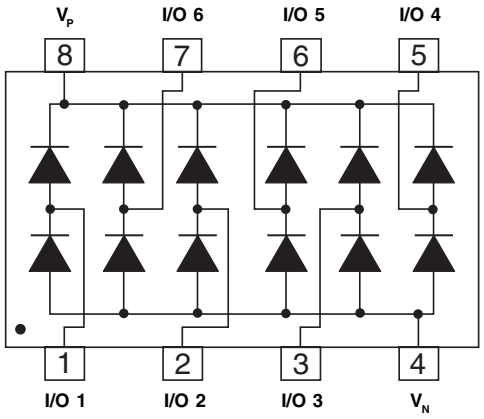
FEATURES

- ✔ ESD Protection > 40 kilovolts
- ✔ Low Clamping Voltage
- ✔ Provides Six (6) Lines of Protection
- ✔ ***LOW LEAKAGE CURRENT < 200nA***
- ✔ ***ULTRA LOW CAPACITANCE: 5pF Typical***

MECHANICAL CHARACTERISTICS

- ✔ Molded JEDEC SO-8
- ✔ Weight 0.1 grams (Approximate)
- ✔ 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

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}	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_{RQ} nA	TYPICAL CAPACITANCE @0V, 1 MHz Cj pF
ET723	STA	20	2	12	20	200	5

Note 1: V_{RRM} is $+V_{CC}$ for pin 8, $-V_{EE}$ for pin 4.
Note 2: +20V from pin 8 to 1, 8 to 2, 8 to 3, 8 to 6, 8 to 7. -20V from pin 4 to 1, 4 to 2, 4 to 3, 4 to 6 and 4 to 7.
Note 3: +20V from pin 8 to 4.

FIGURE 1
NON-REPETITIVE PEAK PULSE CURRENT CAPABILITY

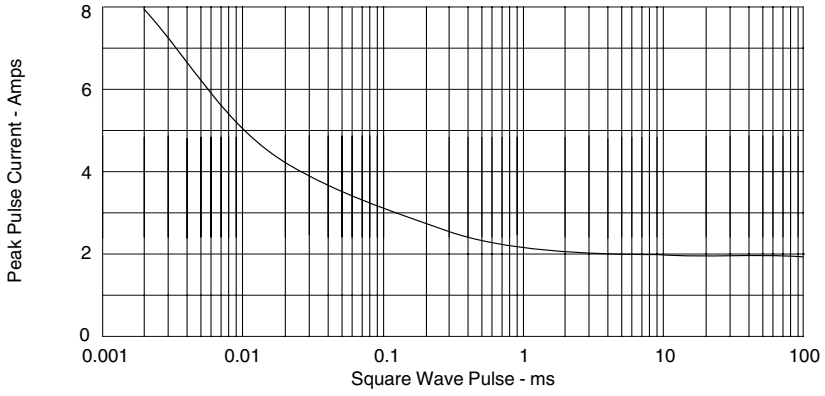
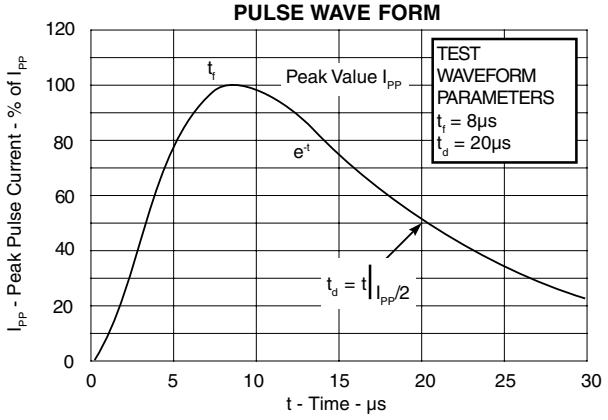


FIGURE 2
PULSE WAVE FORM



GRAPHS

FIGURE 3
TYPICAL LOW CURRENT FORWARD VOLTAGE DROP

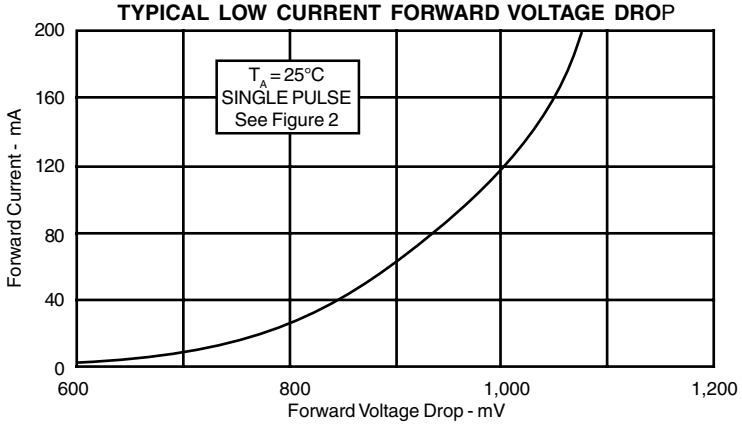
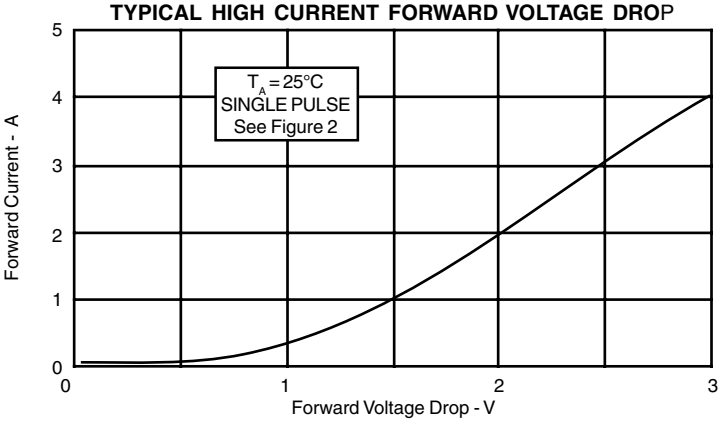
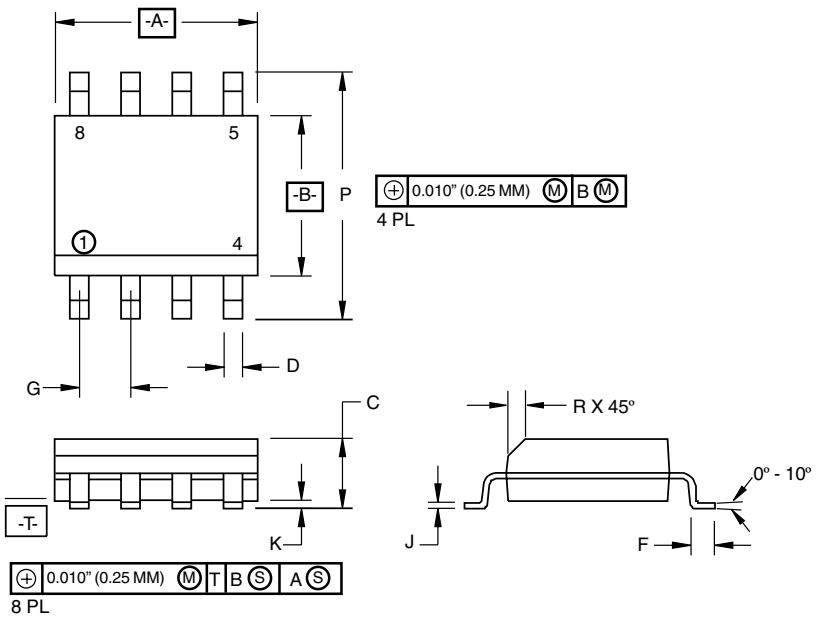


FIGURE 4
TYPICAL HIGH CURRENT FORWARD VOLTAGE DROP

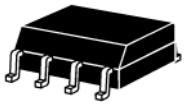


PACKAGE OUTLINE & DIMENSIONS

PACKAGE OUTLINE



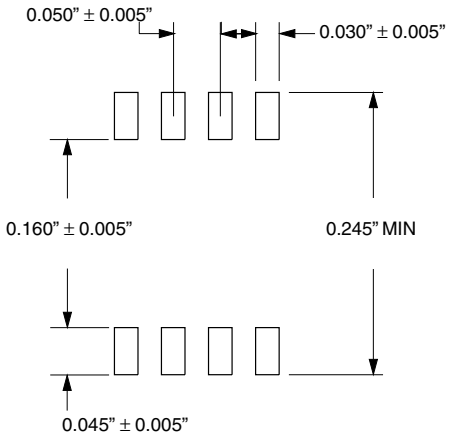
SO-8



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

MOUNTING PAD



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., *ET723-T7*.
3. Suffix-T13 = 13 Inch Reel - 2,500 pieces per 12mm tape, i.e., *ET723-T13*.
4. No Suffix = Product Shipped in Tubes of 98 pcs per Tube.

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

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