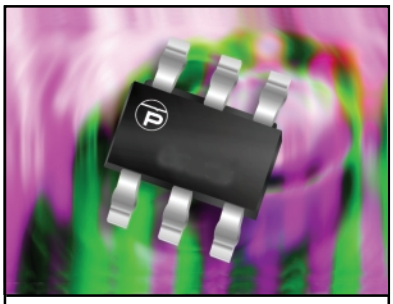
PROTEK DEVICES
Only One Name Means ProTek'Tion™

ET724

STEERING DIODE ARRAY

APPLICATIONS



SOT-23-6

- ✔ Ethernet - 10/100/1000 Base T
- ✔ Cellular Phones
- ✔ Set Top Box Interface
- ✔ Sensor Interface
- ✔ 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)

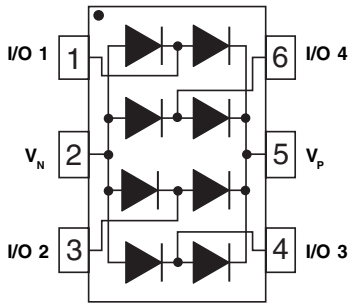
FEATURES

- ✔ ESD Protection > 40 kilovolts
- ✔ Low Clamping Voltage
- ✔ Provides Four (4) Lines of Protection
- ✔ ***LOW LEAKAGE CURRENT < 100nA***
- ✔ ***ULTRA LOW CAPACITANCE: 3pF Typical***

MECHANICAL CHARACTERISTICS

- ✔ Molded JEDEC SOT-23-6
- ✔ Weight 66 milligrams (Approximate)
- ✔ Flammability rating UL 94V-0
- ✔ 8mm Tape and Reel Per EIA Standard 481
- ✔ Marking: Marking 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}	125	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
ET724	724	20	2	12	10	100	3

Note 1: V_{RRM} is $+V_{CC}$ for pin 5, $-V_{EE}$ for pin 2. Pin 2 also represents ground for unidirectional applications.
Note 2: +20V from pin 5 to 1, 5 to 4, 5 to 3, and 5 to 6. -20V from pin 2 to 1, 2 to 3, 2 to 4, and 2 to 6.
Note 3: +20V from pin 5 to 2.

FIGURE 1
NON-REPETITIVE PEAK PULSE CURRENT CAPABILITY

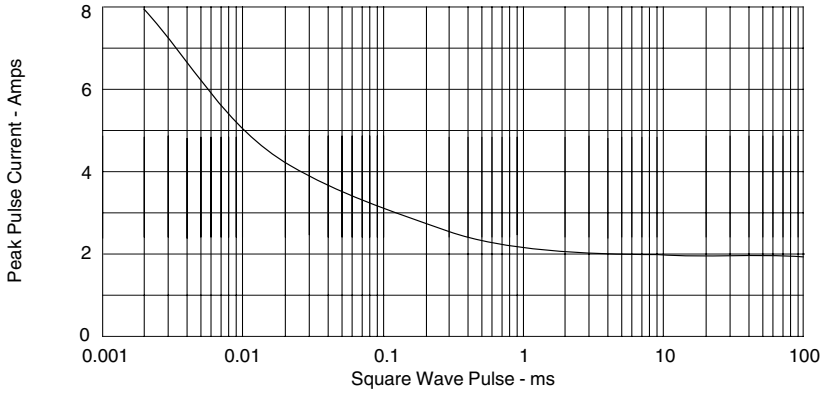
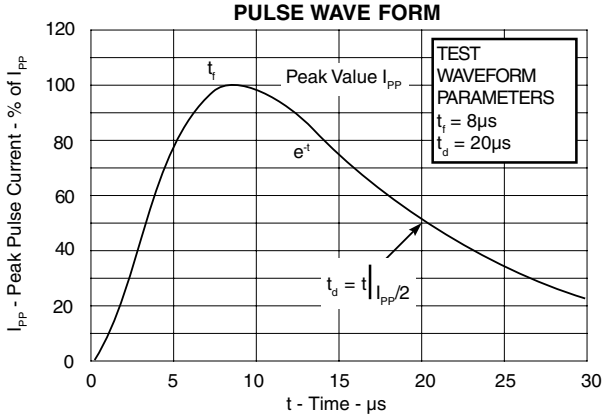


FIGURE 2
PULSE WAVE FORM



GRAPHS

FIGURE 3
TYPICAL LOW CURRENT FORWARD VOLTAGE DROP

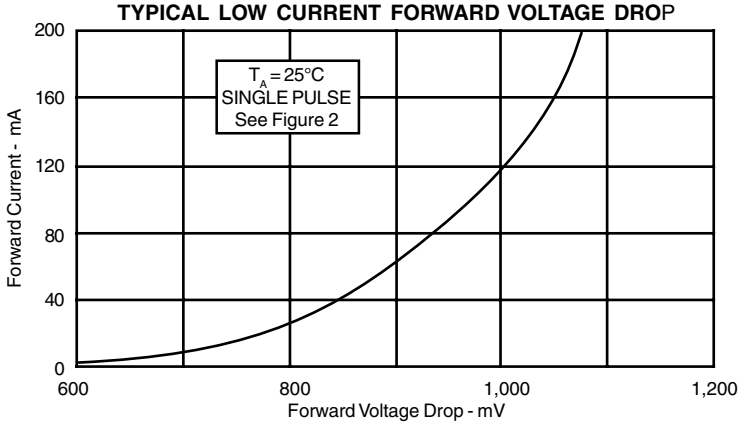
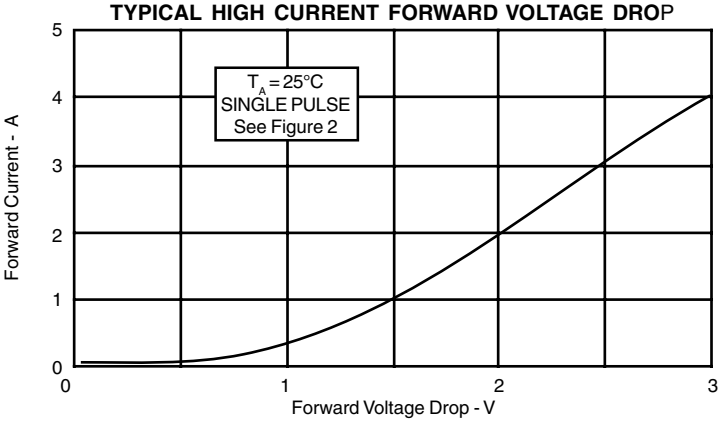
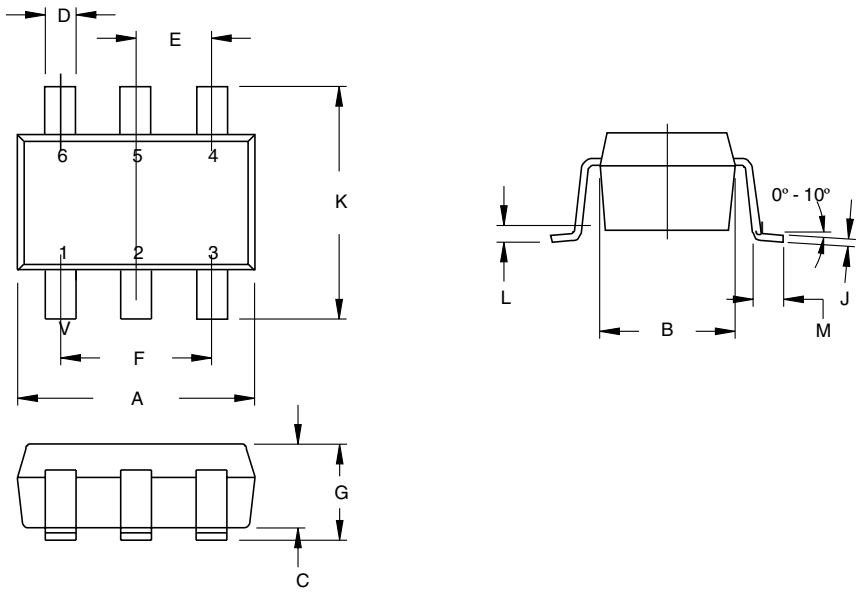


FIGURE 4
TYPICAL HIGH CURRENT FORWARD VOLTAGE DROP

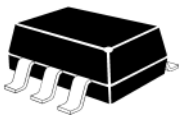


PACKAGE OUTLINE & DIMENSIONS

PACKAGE OUTLINE



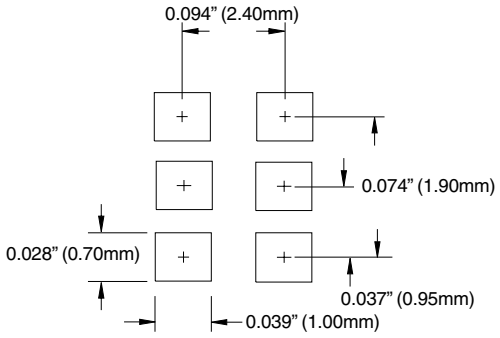
SOT-23-6



PACKAGE DIMENSIONS

DIM	MILLIMETERS MIN	MILLIMETERS MAX	INCHES MIN	INCHES MAX
A	2.80	3.05	0.110	0.120
B	1.50	1.75	0.059	0.070
C	0.90	1.30	0.036	0.051
D	0.35	0.50	0.014	0.020
E	0.85	1.05	0.033	0.040
F	1.70	2.10	0.067	0.083
G	0.90	1.45	0.036	0.057
J	0.090	0.20	0.0035	0.008
K	2.60	3.00	0.102	0.118
L	0.20 TYP	0.20 TYP	0.007 TYP	0.007 TYP
M	0.35	0.55	0.014	0.022

MOUNTING PAD



NOTES

1. Dimensioning and tolerances per ANSI Y14.5M, 1985.
2. Controlling Dimension: Inches
3. Dimensions are exclusive of mold flash and metal burrs.

TAPE & REEL ORDERING NOMENCLATURE

1. Surface mount product is taped and reeled in accordance with EIA-481.
2. Suffix-T7 = 7 Inch Reel - 3,000 pieces per 8mm tape, i.e., *ET724-T7.*
3. Suffix-T13 = 13 Inch Reel - 10,000 pieces per 8mm tape, i.e., *ET724-T13.*

Outline & Dimensions: Rev 1 - 11/01, 06013

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