

STEERING DIODE ARRAY**APPLICATIONS**

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

IEC COMPATIBILITY (EN61000-4)

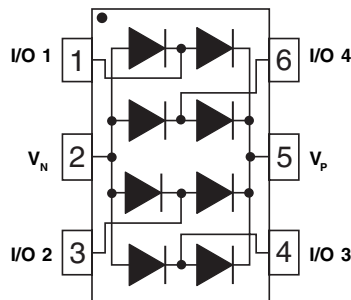
- ✓ 61000-4-2 (ESD): Air - 15kV, Contact - 8kV
- ✓ 61000-4-4 (EFT): 40A - 5/50ns
- ✓ 61000-4-5 (Surge): 12A, 8/20 μ s - Level 1(Line-Gnd) & Level 2(Line-Line)

FEATURES

- ✓ ESD Protection > 40 kilovolts
- ✓ Low Clamping Voltage
- ✓ Provides Four(4) Lines of Protection
- ✓ Low Leakage Current < 100nA
- ✓ Low Capacitance: 3pF Typical
- ✓ RoHS Compliant

MECHANICAL CHARACTERISTICS

- ✓ Molded JEDEC SOT-23-6 Package
- ✓ Weight 16 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
- ✓ 8mm Tape and Reel Per EIA Standard 481
- ✓ Marking: Marking Code & Pin One Defined By DOT on Package

**SOT-23-6****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}	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 8/20 μ s @ 1A V_F VOLTS	MAXIMUM PEAK PULSE FORWARD CURRENT 8/20 μ s 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
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

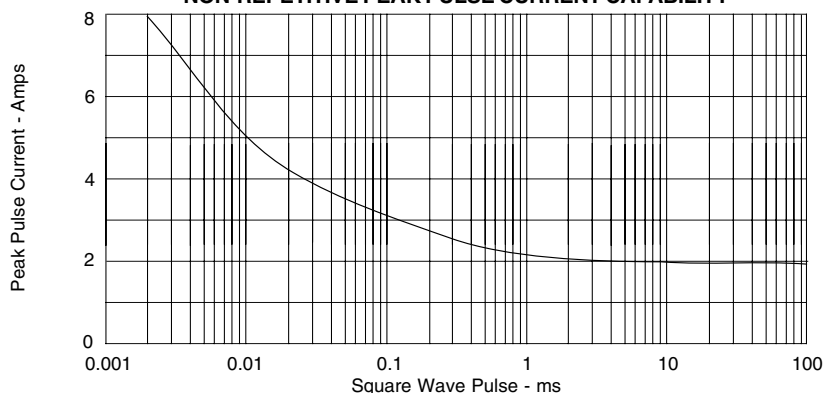
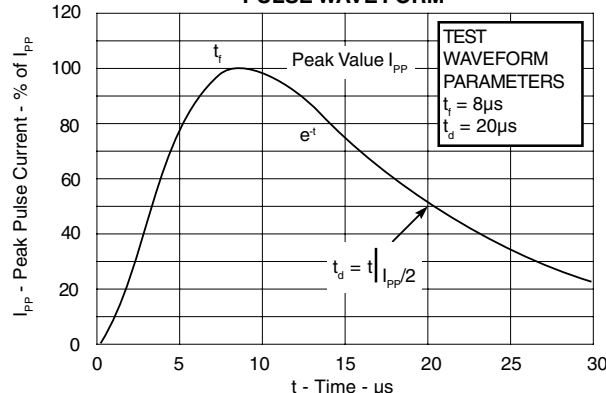
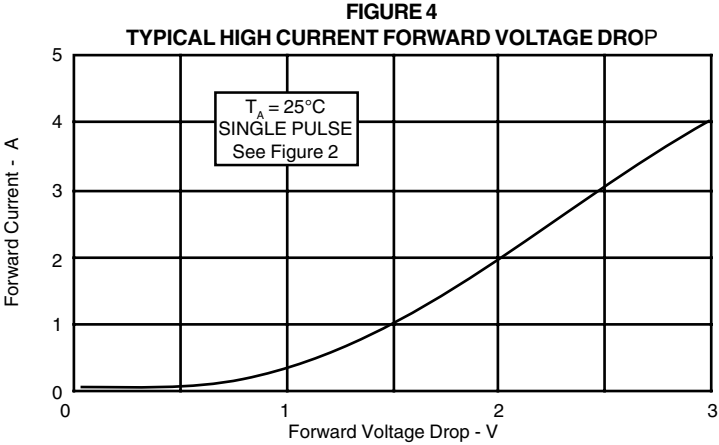
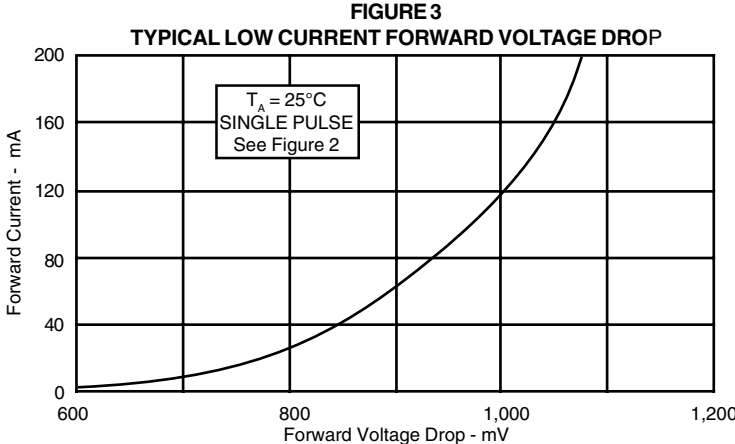


FIGURE 2
PULSE WAVE FORM



GRAPHS



SOT-23-6 PACKAGE OUTLINE & DIMENSIONS

PACKAGE OUTLINE

SOT-23-6

PACKAGE DIMENSIONS

DIM	MILLIMETERS		INCHES	
	MIN	MAX	MIN	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	0.09	0.20	0.003	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

TYPICAL		
DIM	Millimeters	Inches
1	0.70	0.028
2	1.90	0.074
3	0.95	0.037
4	2.40	0.094
5	1.00	0.039

NOTES

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

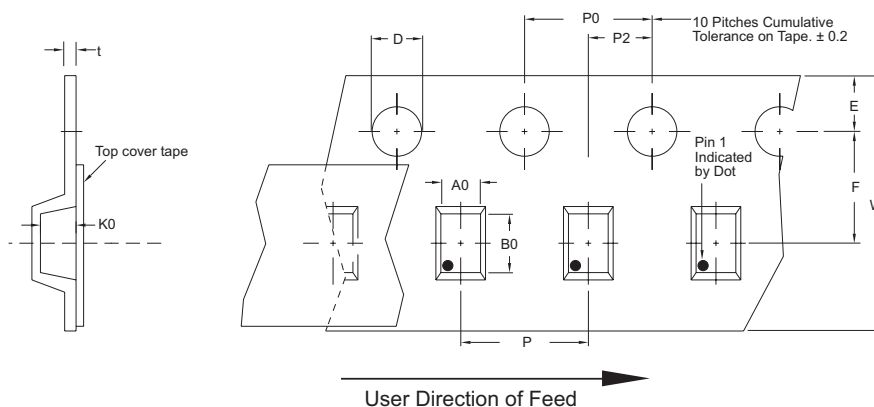
TAPE & REEL/BULK ORDERING NOMENCLATURE

- Surface mount product is taped and reeled in accordance with EIA-481.
- Suffix -T7 = 7 Inch Reel - 3,000 pieces per 8mm tape, i.e., ET724-T7
- Suffix -LF = Lead-Free, Pure-Tin Plating, i.e., ET724-LF-T7.

Outline & Dimensions: Rev 2 - 10/05, 06013

Tape & Reel Specifications (Dimensions in millimeters)

Reel Dia.	Tape Width	A0	B0	K0	D	E	F	W	P0	P2	P	tmax
178mm (7")	8mm	3.20 ± 0.10	3.20 ± 0.10	1.65 ± 0.10	1.50 ± 0.10	1.75 ± 0.10	3.50 ± 0.05	8.00 ± 0.30	4.00 ± 0.10	2.00 ± 0.05	4.00 ± 0.10	0.25



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