

## STEERING DIODE ARRAY

## APPLICATIONS

- ✓ Notebook & Desktop Computers
- ✓ Set Top Box Interface
- ✓ Video Port Protection
- ✓ Handheld Electronics
- ✓ Personal Digital Assistant (PDA)
- ✓ Sensor Interface

## IEC COMPATIBILITY (EN61000-4)

- ✓ 61000-4-2 (ESD): Air - 15kV, Contact - 8kV
- ✓ 61000-4-4 (EFT): 40A - 5/50ns

## FEATURES

- ✓ ESD Protection > 40 kilovolts
- ✓ 350mW Continuous Power Dissipation
- ✓ Provides Six (6) Lines of Protection
- ✓ Low Leakage Current < 1.0 $\mu$ A
- ✓ Ultra Low Capacitance: 3pF Typical
- ✓ RoHS Compliant

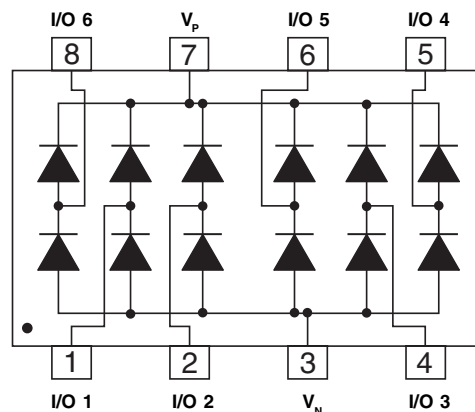
## MECHANICAL CHARACTERISTICS

- ✓ 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: Part Number, 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

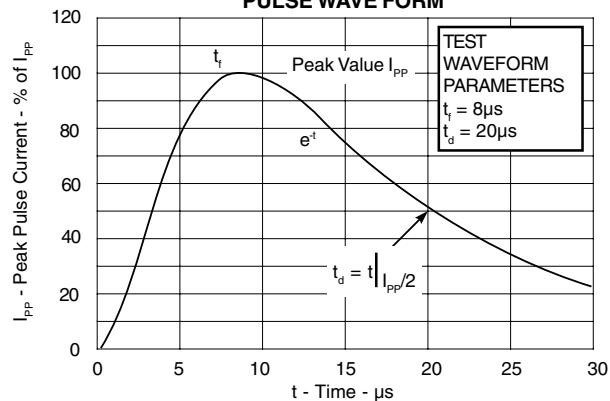
PARAMETER	SYMBOL	VALUE	UNITS
Operating Temperature	$T_A$	-55 to 150	°C
Storage Temperature	$T_{STG}$	-55 to 150	°C
Continuous Power Dissipation	$P_{PC}$	350	mW

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

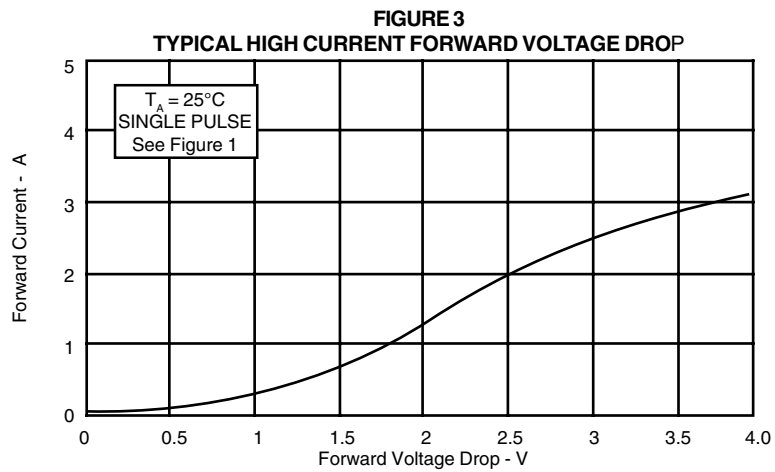
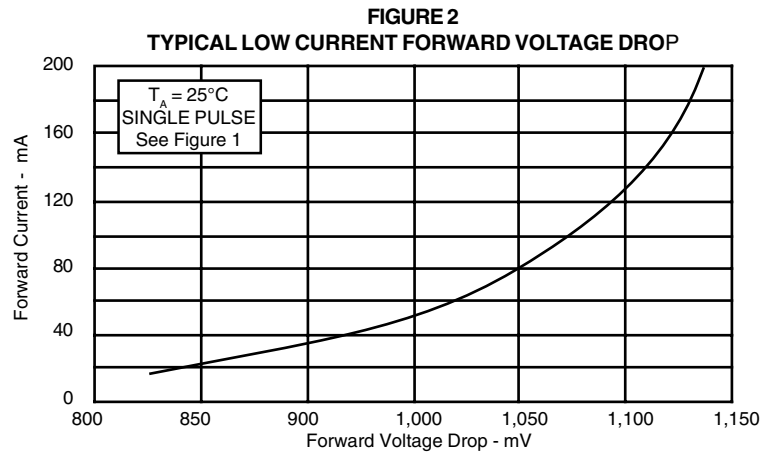
PART NUMBER	DEVICE MARKING CODE	REPETITIVE PEAK REVERSE VOLTAGE (See Note 1) $V_{RRM}$ VOLTS	MAXIMUM FORWARD VOLTAGE @20mA $V_F$ VOLTS	MAXIMUM PEAK PULSE FORWARD CURRENT (See Fig. 1) @ 8/20µs $I_{FM}$ AMPS	MAXIMUM REVERSE LEAKAGE CURRENT $V_{RRM}$ @5.5V $I_R$ µA	TYPICAL CAPACITANCE @0V, 1 MHz $C_j$ pF
IO6LC	IO6LC	30	0.95	3.5	0.1	3

**Note 1:**  $V_{RRM}$  is  $+V_{CC}$  to pin 7,  $-V_{EE}$  to pin 3.

**FIGURE 1  
PULSE WAVE FORM**



## GRAPHS



## SO-8 PACKAGE OUTLINE & DIMENSIONS

### PACKAGE OUTLINE

⊕ 0.010" (0.25 MM) (M) B (M)  
 4 PL

⊕ 0.010" (0.25 MM) (M) T B (S) A (S)  
 8 PL

### 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

**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. IO6LC-T7.
3. Suffix-T13 = 13 Inch Reel - 2,500 pieces per 12mm tape, i.e., IO6LC-T13.
4. Suffix - LF = Lead-Free, Pure-Tin Plating, i.e., IO6LC-LF-T7.
5. No Suffix = Product Shipped in Tubes of 98 pcs per Tube.

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

### MOUNTING PAD

$0.050 \pm 0.005"$   
 $0.160 \pm 0.005"$   
 $0.030 \pm 0.005"$   
 $0.245" \text{ MIN}$   
 $0.045 \pm 0.005"$

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