

STEERING DIODE ARRAY

APPLICATIONS

- ✓ USB Interface Ports
- ✓ Cellular Phones
- ✓ Video
- ✓ Handheld Electronics
- ✓ Personal Computers

IEC COMPATIBILITY (EN61000-4)

- ✓ 61000-4-2 (ESD): Air - 15kV, Contact - 8kV
- ✓ 61000-4-4 (EFT): 40A - 5/50ns
- ✓ 61000-4-5 (Surge): 24A, 8/20 μ s - Level 2(Line-Gnd) & Level 3(Line-Line)

FEATURES

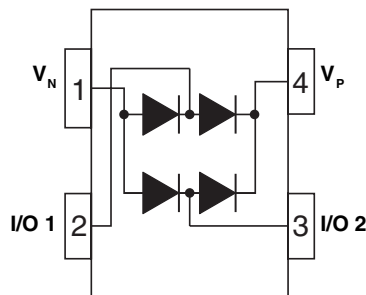
- ✓ ESD Protection > 40 kilovolts
- ✓ 225 Milliwatt Continuous Power Dissipation
- ✓ Provides Two (2) Lines of Protection
- ✓ Low Leakage Current < 1.0 μ A
- ✓ Ultra Low Capacitance: 3pF Typical
- ✓ RoHS Compliant

MECHANICAL CHARACTERISTICS

- ✓ Molded JEDEC SOT-143
- ✓ Weight 9 milligrams (Approximate)
- ✓ Available in Lead-Free Pure-Tin Plating(Annealed)
- ✓ Solder Reflow Temperature:
Pure-Tin - Sn, 100: 260-270°C
- ✓ Flammability Rating UL 94V-0
- ✓ 8mm Tape and Reel Per EIA Standard 481
- ✓ Marking: Marking Code



PIN CONFIGURATION



DEVICE CHARACTERISTICS

MAXIMUM RATINGS @ 25°C Unless Otherwise Specified

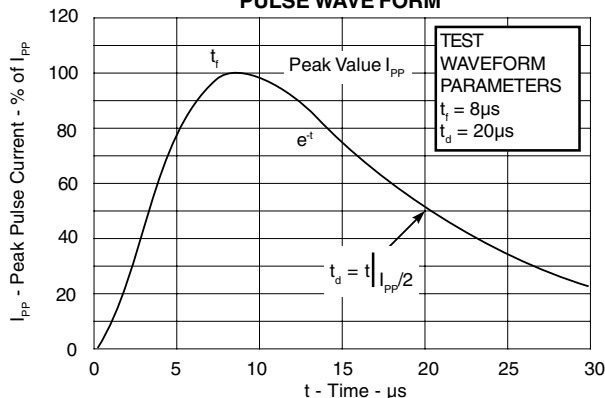
PARAMETER	SYMBOL	VALUE	UNITS
Operating Temperature	T_A	-55°C to 150°C	°C
Storage Temperature	T_{STG}	-55°C to 150°C	°C
Forward Peak Pulse Current ($t_p = 8/20\mu s$)	I_{PP}	24	A

ELECTRICAL CHARACTERISTICS PER LINE @ 25°C Unless Otherwise Specified

PART NUMBER	DEVICE MARKING CODE	REPETITIVE PEAK REVERSE VOLTAGE V_{FRM} VOLTS	MINIMUM REVERSE BREAKDOWN VOLTAGE $I @ 50\mu A$ $V_{(BR)}$ VOLTS	MAXIMUM REVERSE LEAKAGE CURRENT $@ V_{FRM}$ I_r μA	MAXIMUM FORWARD CLAMPING VOLTAGE 8/20 μs $I_{PP} @ 1A$ V_{FC} VOLTS	MAXIMUM FORWARD CLAMPING VOLTAGE 8/20 μs $I_{PP} @ 24A$ V_{FC} VOLTS	MAXIMUM CAPACITANCE (See Note 1) @0V, 1 MHz C_d pF
SR70	PSA	70	85	1	1.5	7	10

Note 1: Measured between I/O pins and ground.

**FIGURE 1
PULSE WAVE FORM**



SOT-143 PACKAGE OUTLINE & DIMENSIONS

PACKAGE OUTLINE		SOT-143			
PACKAGE DIMENSIONS					
DIM	MILLIMETERS		INCHES		
	MIN	MAX	MIN	MAX	
A	2.80	3.04	0.110	0.120	
B	1.20	1.39	0.047	0.055	
C	0.84	1.14	0.033	0.045	
D	0.39	0.50	0.015	0.020	
F	0.79	0.93	0.031	0.037	
G	1.78	2.03	0.070	0.080	
H	0.013	0.10	0.0005	0.004	
J	0.08	0.15	0.003	0.006	
K	0.46	0.60	0.018	0.024	
L	0.445	0.60	0.0175	0.024	
L1	0.40	0.60	0.016	0.024	
R	0.72	0.83	0.028	0.033	
S	2.11	2.48	0.083	0.098	

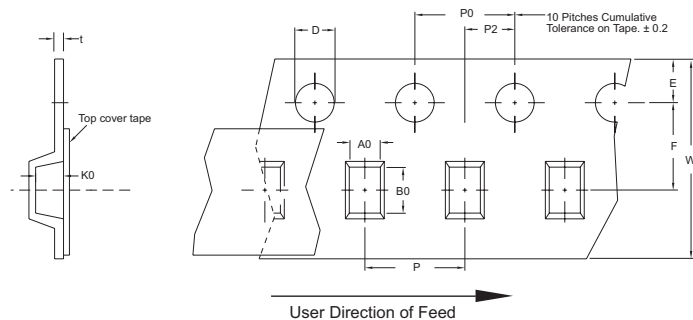
MOUNTING PAD		
TYPICAL		
DIM	Millimeters	Inches
X	1.2 x 0.9	0.047 x 0.035
Yx3	0.85 x 0.85	0.033 x 0.033
m	2.0	0.079
n	1.9	0.075

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., SR70-T7.				
3. Suffix-T13 = 13 Inch Reel - 10,000 pieces per 8mm tape, i.e., SR70-T13.				
4. Suffix-LF = Lead-Free, Pure-Tin Plating, i.e., SR70-LF-T7.				

Outline & Dimensions: Rev 3 - 3/08, 06011

Tape & Reel Specifications (Dimensions in millimeters)

Reel Dia.	Tape Width	A0	B0	K0	D	E	F	W	P0	P2	P	tmax
178mm (7")	8mm	3.10 ± 0.10	2.70 ± 0.10	1.35 ± 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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