

STEERING DIODE / TVS ARRAY COMBO

APPLICATIONS

- ✓ Ethernet - 10/100/1000 Base T
- ✓ Cellular Phones
- ✓ Handheld & Portable Electronics
- ✓ Video/Graphics Card
- ✓ USB 2.0 Interface
- ✓ DVI Interface

IEC COMPATIBILITY (EN61000-4)

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

FEATURES

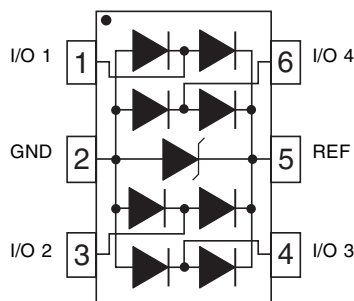
- ✓ 200 Watts Peak Pulse Power per Line ($t_p = 8/20\mu s$)
- ✓ ESD Protection > 40 kilovolts
- ✓ Low Clamping Voltage
- ✓ **PROTECTS FOUR (4) LINES**
- ✓ **ULTRA LOW CAPACITANCE: 1.9pF Typical**
- ✓ RoHS Compliant in Lead Free Versions

MECHANICAL CHARACTERISTICS

- ✓ Molded JEDEC SC-70-6L Package
- ✓ Weight 7 milligrams (Approximate)
- ✓ Available in Tin-Lead or Lead-Free Nickel-Paladium-Gold Plating
- ✓ Solder Reflow Temperature:
 - Tin-Lead - Sn/Pb, 85/15: 240-245°C
 - Nickel-Paladium-Gold (Ni/Pd/Au) Sn/Ag/Cu, 96/3.5/0.5: 260-270°C
- ✓ 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

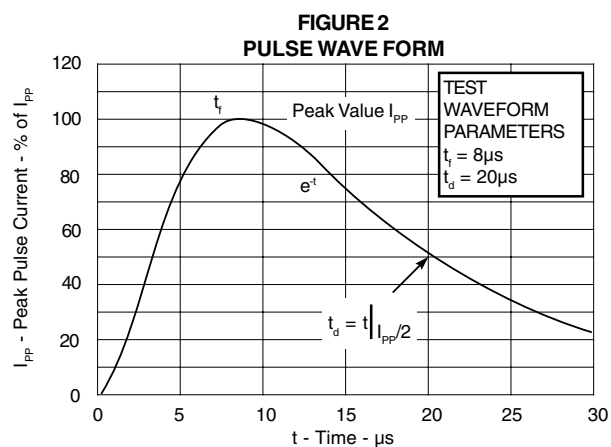
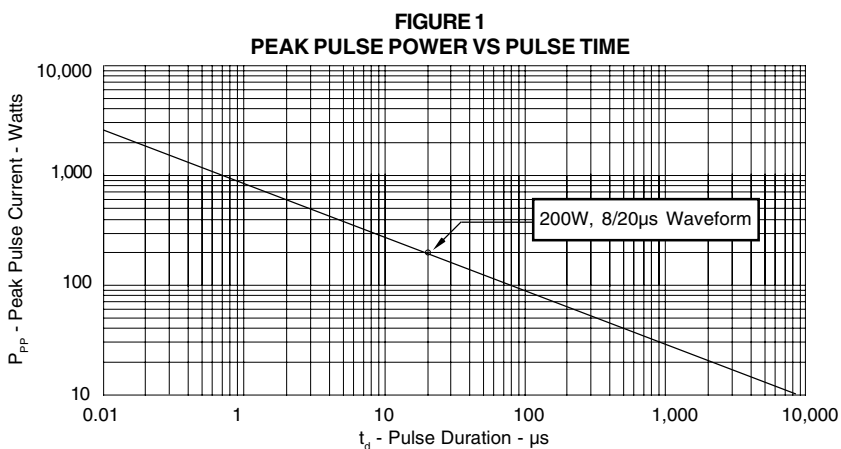


DEVICE CHARACTERISTICS

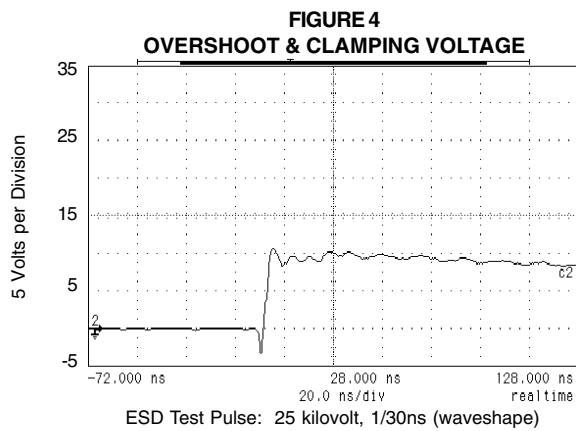
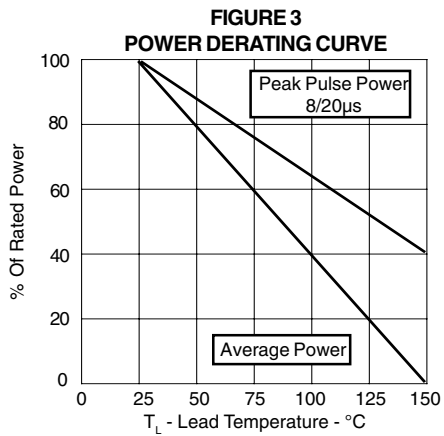
MAXIMUM RATINGS @ 25°C Unless Otherwise Specified			
PARAMETER	SYMBOL	VALUE	UNITS
Peak Pulse Power ($t_p = 8/20\mu s$) - See Figure 1	P_{PP}	200	Watts
Operating Temperature	T_J	-55°C to 150°C	°C
Storage Temperature	T_{STG}	-55°C to 150°C	°C
Forward Surge Rating (1/20 seconds @ 25°C, $I_F = 10mA$)	V_F	1.5	Volts

ELECTRICAL CHARACTERISTICS PER LINE @ 25°C Unless Otherwise Specified							
PART NUMBER	DEVICE MARKING	RATED STAND-OFF VOLTAGE (See Note 1)	MINIMUM BREAKDOWN VOLTAGE (See Note 1)	MAXIMUM CLAMPING VOLTAGE (See Fig. 2) (See Note 1)	MAXIMUM CLAMPING VOLTAGE (See Fig. 2) (See Note 1)	MAXIMUM LEAKAGE CURRENT (See Note 1)	TYPICAL CAPACITANCE (See Note 1)
		V_{WM} VOLTS	@ 1mA $V_{(BR)}$ VOLTS	@ $I_P = 1A$ V_C VOLTS	@ $I_P = 5A$ V_C VOLTS	@ V_{WM} I_D μA	@ 0V, 1 MHz $C_{i(SD)}$ pF
PLR0504F	A5	5.0	6.0	15.0	25.0	3	1.9

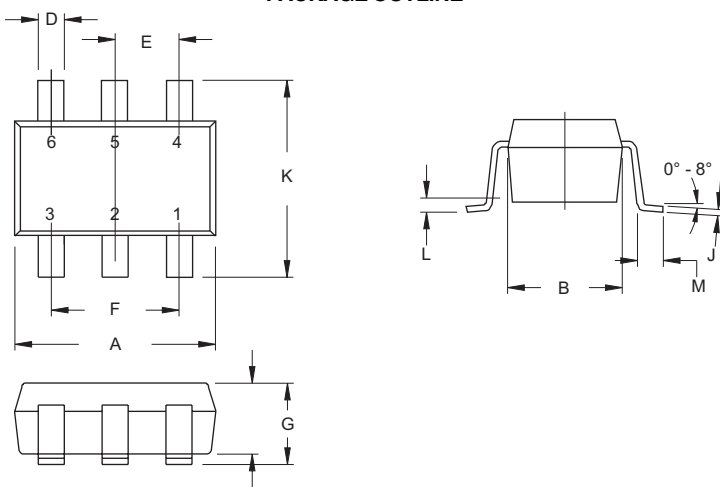

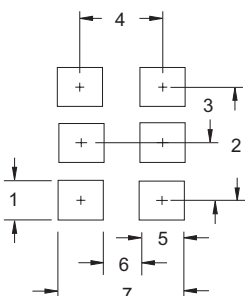
Note 1: From I/O Pin to Ground.



GRAPHS



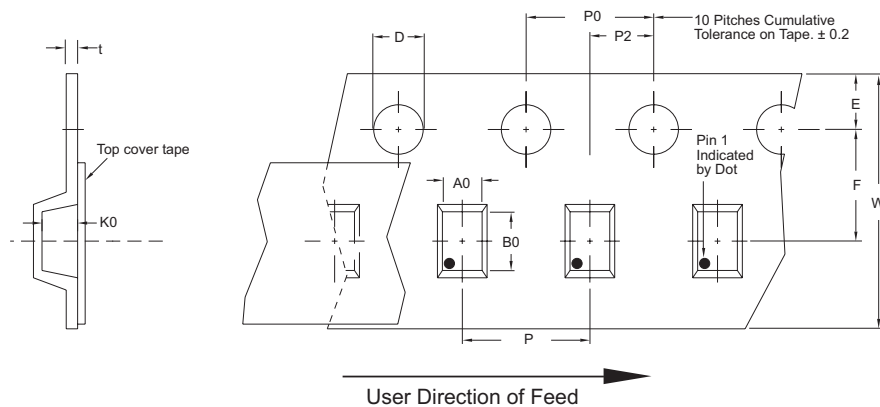
PACKAGE OUTLINE & DIMENSIONS

<p align="center">PACKAGE OUTLINE</p> 	<p align="center">SC70-6L</p>  <p align="center">PACKAGE DIMENSIONS</p> <table border="1" style="width:100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th rowspan="2">DIM</th> <th colspan="2">MILLIMETERS</th> <th colspan="2">INCHES</th> </tr> <tr> <th>MIN</th> <th>MAX</th> <th>MIN</th> <th>MAX</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>1.90</td> <td>2.15</td> <td>0.074</td> <td>0.084</td> </tr> <tr> <td>B</td> <td>1.15</td> <td>1.35</td> <td>0.045</td> <td>0.055</td> </tr> <tr> <td>C</td> <td>0.80</td> <td>1.00</td> <td>0.031</td> <td>0.040</td> </tr> <tr> <td>D</td> <td>0.15</td> <td>0.30</td> <td>0.006</td> <td>0.012</td> </tr> <tr> <td>E</td> <td>0.65 BSC</td> <td>-</td> <td>0.0255 BSC</td> <td>-</td> </tr> <tr> <td>F</td> <td>1.30 BSC</td> <td>-</td> <td>0.0512 BSC</td> <td>-</td> </tr> <tr> <td>G</td> <td>0.80</td> <td>1.10</td> <td>0.031</td> <td>0.043</td> </tr> <tr> <td>J</td> <td>0.08</td> <td>0.25</td> <td>0.003</td> <td>0.010</td> </tr> <tr> <td>K</td> <td>2.00</td> <td>2.20</td> <td>0.078</td> <td>0.086</td> </tr> <tr> <td>L</td> <td>0</td> <td>0.10</td> <td>0</td> <td>0.004</td> </tr> <tr> <td>M</td> <td>0.26</td> <td>0.46</td> <td>0.010</td> <td>0.018</td> </tr> </tbody> </table>	DIM	MILLIMETERS		INCHES		MIN	MAX	MIN	MAX	A	1.90	2.15	0.074	0.084	B	1.15	1.35	0.045	0.055	C	0.80	1.00	0.031	0.040	D	0.15	0.30	0.006	0.012	E	0.65 BSC	-	0.0255 BSC	-	F	1.30 BSC	-	0.0512 BSC	-	G	0.80	1.10	0.031	0.043	J	0.08	0.25	0.003	0.010	K	2.00	2.20	0.078	0.086	L	0	0.10	0	0.004	M	0.26	0.46	0.010	0.018
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Outline & Dimensions: Rev 3 - 9/05, 06019

Tape & Reel Specifications (Dimensions in millimeters)

Reel Dia.	Tape Width	A0	B0	K0	D	E	F	W	P0	P2	P	tmax
178mm (7")	8mm	2.25 ± 0.10	2.34 ± 0.10	1.22 ± 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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