

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)

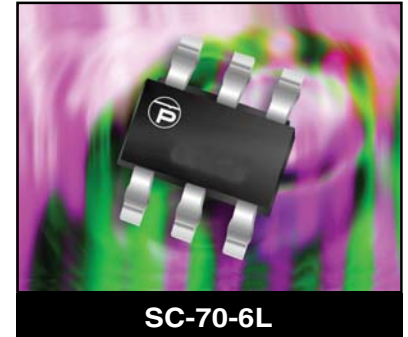
- ✓ 61000-4-2 (ESD): Air - 15kV, Contact - 8kV
- ✓ 61000-4-4 (EFT): 40A - 5/50ns

FEATURES

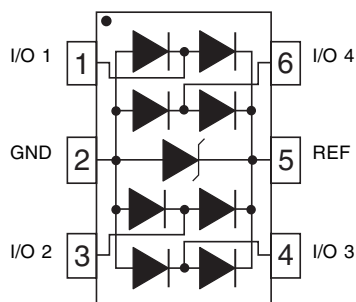
- ✓ 200 Watts Peak Pulse Power per Line ($t_p = 8/20\mu s$)
- ✓ ESD Protection > 40 kilovolts
- ✓ Low Clamping Voltage
- ✓ Protects Four(4) Lines
- ✓ Ultra-Low Capacitance: 1.9pF Typical
- ✓ RoHS Compliant

MECHANICAL CHARACTERISTICS

- ✓ Molded JEDEC SC-70-6L
- ✓ Weight 7 milligrams (Approximate)
- ✓ Available in Lead-Free Nickel-Paladium-Gold Plating
- ✓ Solder Reflow Temperature:
Nickel-Paladium-Gold (Ni/Pd/Au) Sn/Ag/Cu, 96/3.5/0.5: 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 Top of Package



PIN CONFIGURATION



PLR0504F

DEVICE CHARACTERISTICS

MAXIMUM RATINGS @ 25°C Unless Otherwise Specified

PARAMETER	SYMBOL	VALUE	UNITS
Peak Pulse Power (tp = 8/20µs) - See Figure 1	P _{PP}	200	Watts
Operating Temperature	T _L	-55 to 150	°C
Storage Temperature	T _{STG}	-55 to 150	°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) V _{WM} VOLTS	MINIMUM BREAKDOWN VOLTAGE (See Note 1) @ 1mA V _(BR) VOLTS	MAXIMUM CLAMPING VOLTAGE (See Fig. 2) (See Note 1) @ I _p = 1A V _C VOLTS	MAXIMUM CLAMPING VOLTAGE (See Fig. 2) (See Note 1) @ I _p = 5A V _C VOLTS	MAXIMUM LEAKAGE CURRENT (See Note 1) @ V _{WM} I _b µA	MAXIMUM CAPACITANCE (See Note 1) @ 0V, 1 MHz C _{J(SD)} pF
PLR0504F	A5	5.0	6.0	15.0	25.0	3	1.9

Note 1: From I/O Pin to Ground.

FIGURE 1
PEAK PULSE POWER VS PULSE TIME

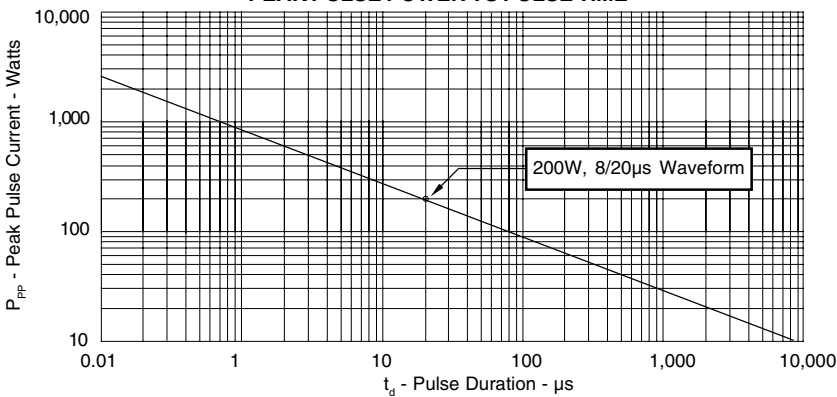
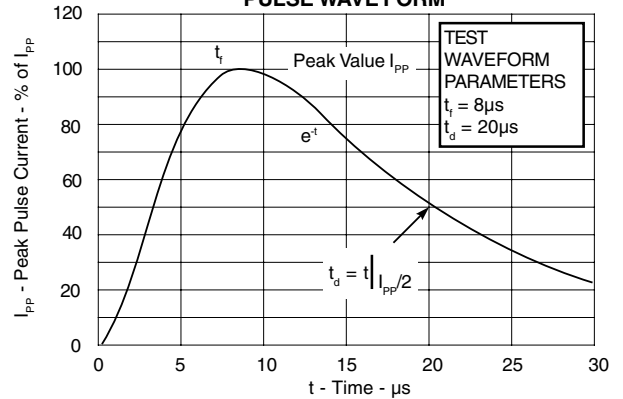
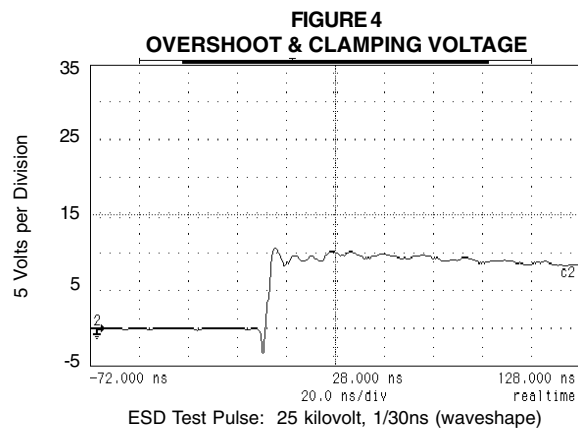
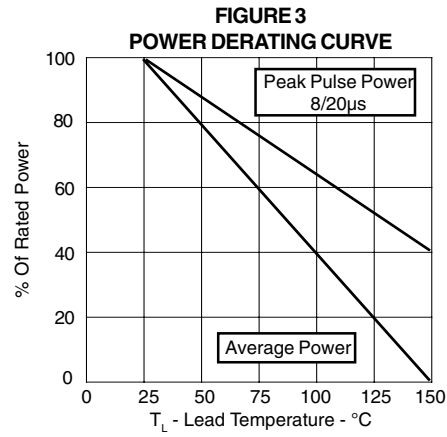


FIGURE 2
PULSE WAVE FORM



GRAPHS



PLR0504F

SC-70-6L PACKAGE OUTLINE & DIMENSIONS

PACKAGE OUTLINE

SC70-6L

PACKAGE DIMENSIONS

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

MOUNTING PAD

TYPICAL		
DIM	Millimeters	Inches
1	0.50	0.020
2	1.30	0.051
3	0.65	0.026
4	1.72	0.068
5	0.60	0.024
6	1.11	0.044
7	2.33	0.092

NOTES

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

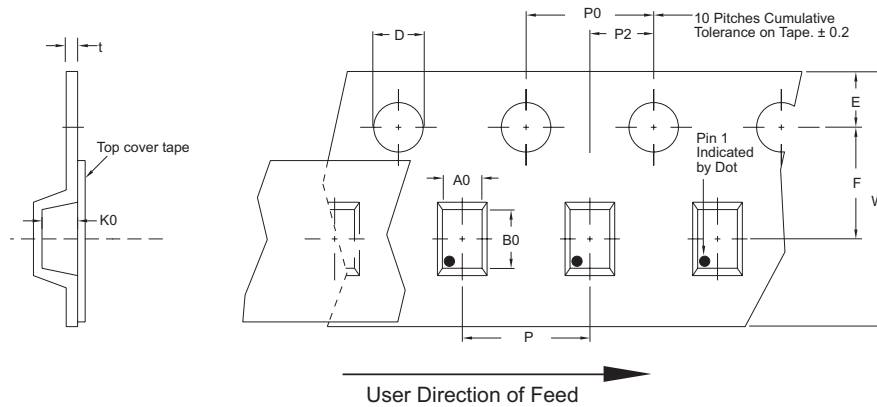
TAPE & REEL ORDERING NOMENCLATURE

1. Surface mount product is taped and reeled in accordance with EIA-481.
2. Suffix-T73 = 7 Inch Reel - 3,000 pieces per 8mm tape, i.e., *PLR0504F-T73*.
3. Suffix-P = Lead-Free Nickel-Palladium-Gold Plating, i.e., *PLR0504F-P-T73*.

Outline & Dimensions: Rev 4 - 4/06, 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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