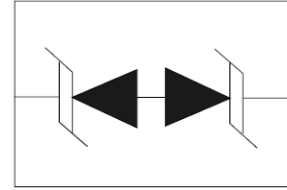


## General Description

The LESD8D7.0CA is designed to protect voltage sensitive components from ESD and transient voltage events. Excellent clamping capability, low leakage, and fast response time, make these parts ideal for ESD protection on designs where board space is at a premium.



## Features

- Small Body Outline Dimensions
- Low Body Height
- Peak Power up to 80Watts @ 8 x 20μ s Pulse  
Low Leakage
- Response Time is Typically < 1 ns
- ESD Rating of Class 3 (> 16 kV) per Human Body Model
- IEC61000-4-2 Level 4 ESD Protection
- IEC61000-4-4 Level 4 EFT Protection
- We declare that the material of product compliance with RoHS requirements.

## Applications

- Cellular phones
- Portable devices
- Digital cameras
- Power supplies

## Absolute Ratings (T<sub>amb</sub>=25°C )

Symbol	Parameter	Value	Units
P <sub>PP</sub>	Peak Pulse Power (t <sub>p</sub> = 8/20μs)	80	W
T <sub>L</sub>	Maximum lead temperature for soldering during 10s	260	°C
T <sub>stg</sub>	Storage Temperature Range	-55 to +150	°C
T <sub>op</sub>	Operating Temperature Range	-40 to +125	°C
T <sub>j</sub>	Maximum junction temperature	150	°C
	IEC61000-4-2 (ESD)	air discharge ±20 contact discharge ±15	KV
	IEC61000-4-4 (EFT)	40	A
	ESD Voltage	Per Human Body Model	16 KV

## Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.  $V_F = 0.9V$  at  $I_F = 10mA$

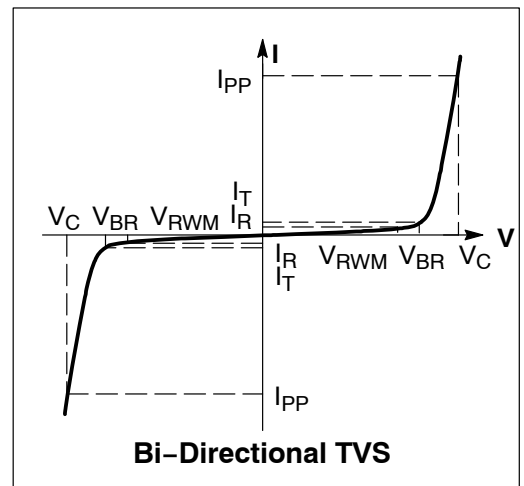
Device	$V_{RWM}$ (V)	$I_R(\mu A)$ @ $V_{RWM}$	$V_{BR}$ (V) @ $I_T$ (Note 1)	$I_T$	$V_C$ (V) @ $I_{PP}=3 A^*$	$V_C$ (V) @ Max $I_{PP}^*$	$I_{PP}$ (A)*	$P_{PK}$ (W)*	$C$ (pF)
	Max	Max	Min	mA	Typ	Max	Max	Max	Typ
LESD8D7.0CAT5G	7.0	1.0	7.2	1.0	13	16	5	80	16

\*Surge current waveform per Figure 2.

- $V_{BR}$  is measured with a pulse test current  $I_T$  at an ambient temperature of 25 °C.

## Electrical Parameter

Symbol	Parameter
$I_{PP}$	Maximum Reverse Peak Pulse Current
$V_C$	Clamping Voltage @ $I_{PP}$
$V_{RWM}$	Working Peak Reverse Voltage
$I_R$	Maximum Reverse Leakage Current @ $V_{RWM}$
$I_T$	Test Current
$V_{BR}$	Breakdown Voltage @ $I_T$
$I_F$	Forward Current
$V_F$	Forward Voltage @ $I_F$



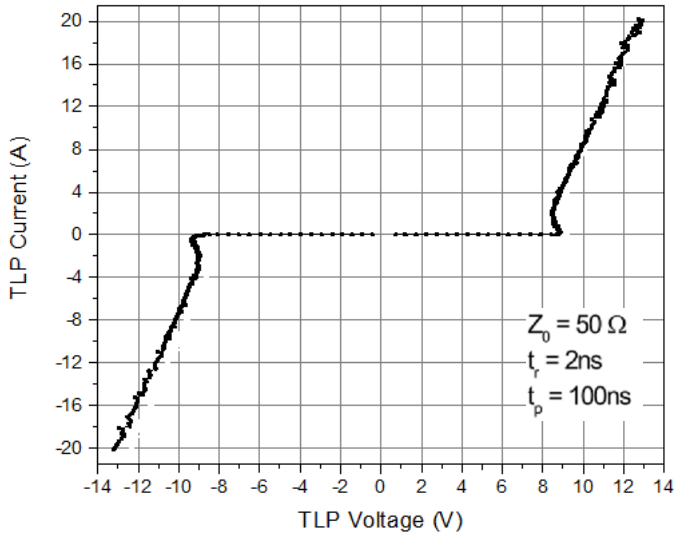


Fig1.TLP Measurement

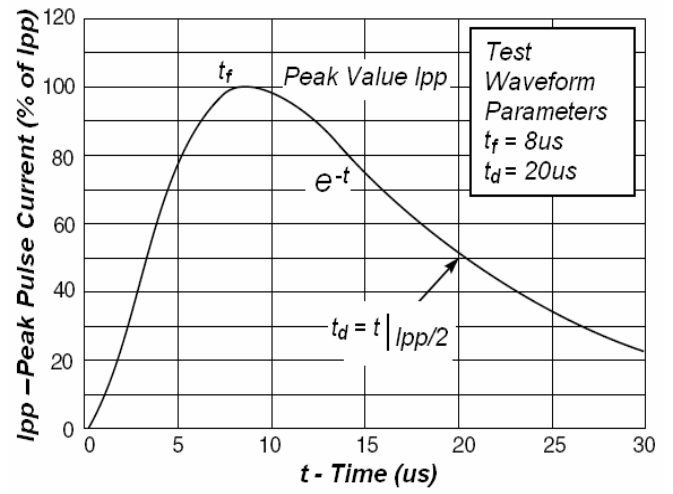


Fig2. Pulse Waveform

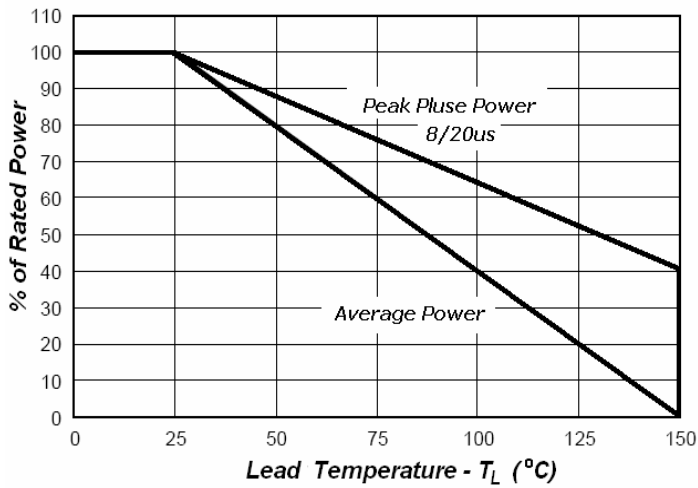
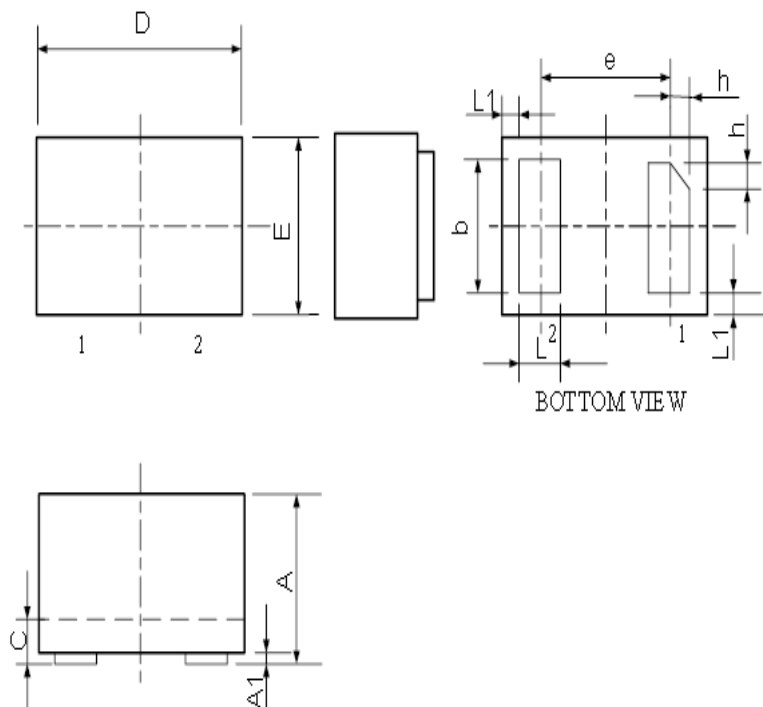


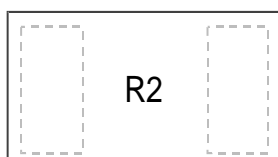
Fig3.Power Derating

### SOD-882 PACKAGE OUTLINE DIMENSIONS



Symbol	Dimensions In Millimeters	
	Minimum	Maximum
A	0.450	0.550
A1	0.000	0.050
b	0.45	0.55
C	0.12	0.18
D	0.950	1.050
e	0.65BSC	
E	0.550	0.650
L	0.200	0.300
L1	0.05REF	
h	0.07	0.17

### Marking



### Ordering information

Order code	Package	Baseqty	Deliverymode
LESD8D7.0CAT5G	SOD-882	10000	Tape and reel