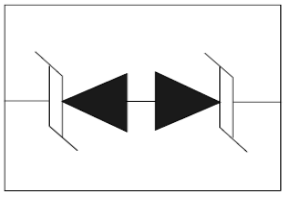
General Description

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_{amb}=25°C)

Symbol	Parameter	Value	Units
P_{PP}	Peak Pulse Power (t_p = 8/20μs)	80	W
T_L	Maximum lead temperature for soldering during 10s	260	°C
T_{stg}	Storage Temperature Range	-55 to +150	°C
T_{op}	Operating Temperature Range	-40 to +125	°C
T_j	Maximum junction temperature	150	°C
	IEC61000-4-2 (ESD) air discharge contact discharge	±20 ±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.VF = 0.9V at IF = 10mA

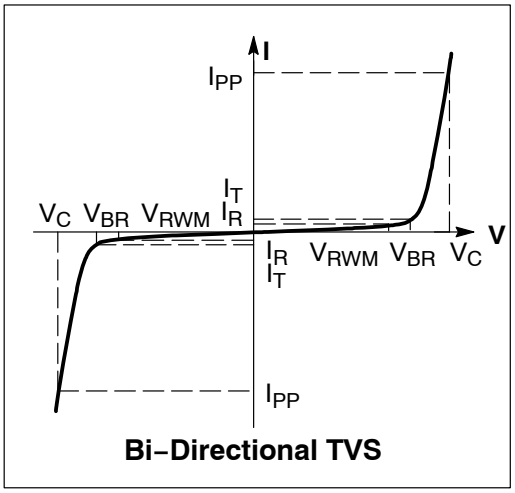
Device	V_{RWM} (V)	I_R(uA) @ V_{RWM}	V_{BR} (V)@ I_T (Note 1)	I_T	V_C (V) @ I_{PP}=3 A*	V_C (V) @ Max I_{PP}*	I_{PP} (A)*	P_{PK} (W)*	C (pF)
	Max	Max	Min	mA	Typ	Max	Max	Max	Typ
LESD8D7.0CAT5G	7.0	1.0	7.2	1.0	13	16	5	80	16

*Surge current waveform per Figure 2.

1. V_{BR} is measured with a pluse test current I_T at an ambient temperature of 25 ℃.

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



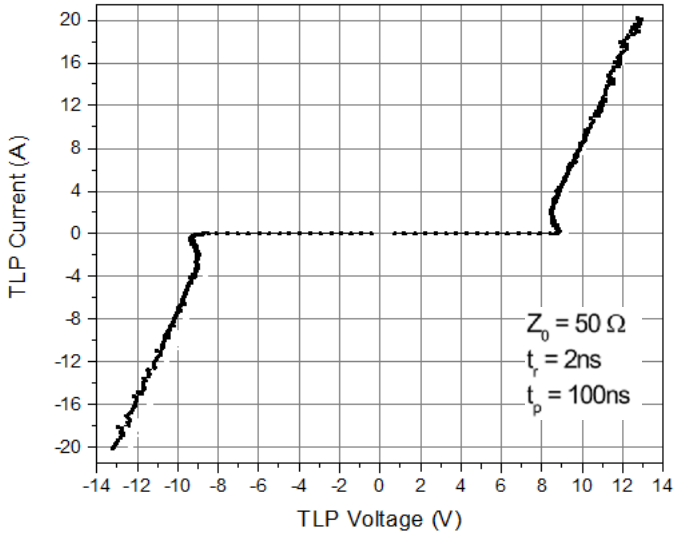


Fig1.TLP Measurement

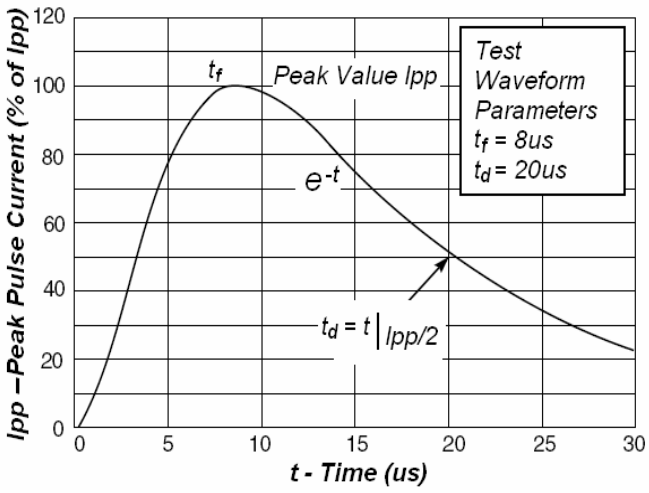


Fig2. Pulse Waveform

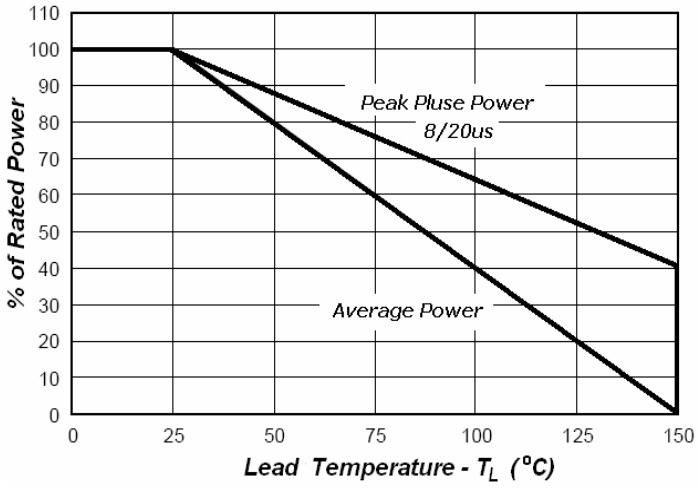
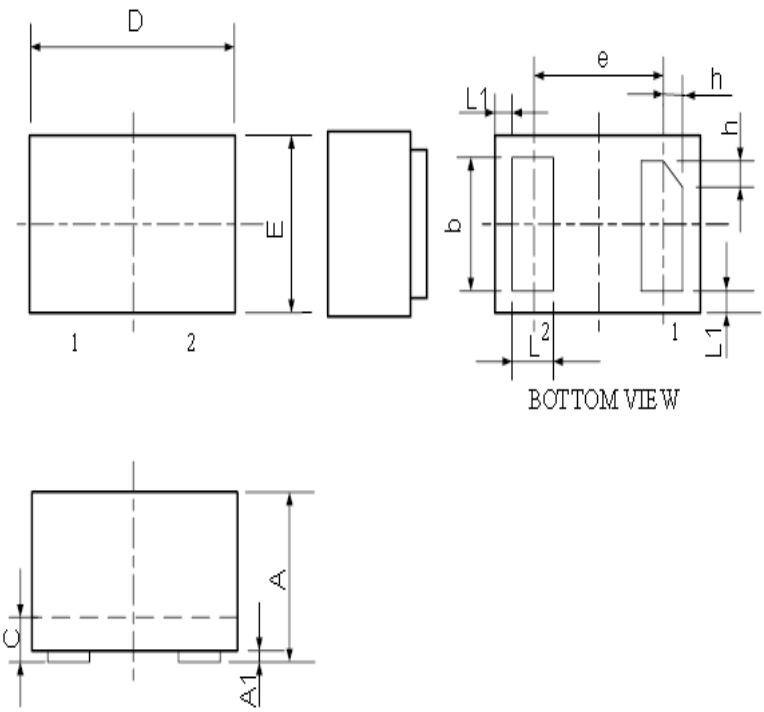


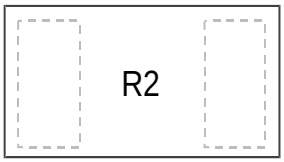
Fig3.Power Derating

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
UMW LESD8D7.0CAT5G	SOD-882	10000	Tape and reel