

### **Discription**

The LESD8D7.0CAT5G protects sensitive semiconductor components from damage or upset due to electrostatic discharge (ESD) and other voltage induced transient events. Excellent clamping capability, low leakage, low capacitance, and fast response time provide best in class protection on designs that are exposed to ESD.

It gives designer the flexibility to protect one bi-directional line in applications where arrays are not practical.



DFN1006-2L (SOD-882)

#### **Features**

- ★Small Body Outline Dimensions
- **★**Low Body Height
- ★ Peak Power up to 80 Watts @ 8 x 20 µs Pulse Low Leakage
- ★Response Time is Typically < 1 ns
- ★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.



Circuit Diagram

Ordering Information

•							
Product ID		Pack	Qty(PCS)				
	LESD8D7.0CAT5G	DFN1006-2L(SOD-882)	10000				

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

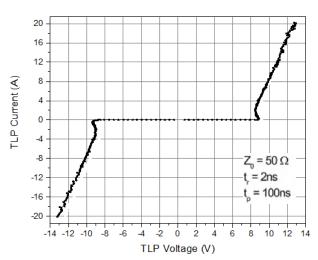
Symbol	Parameter		Value	Units
$P_{PP}$	Peak Pulse Power (t <sub>P</sub> = 8/20µs)	360	W	
TL	Maximum lead temperature for solo	260	°C	
T <sub>stg</sub>	Storage Temperature Range	-55 to +150	°C	
T <sub>op</sub>	Operating Temperature Range	-40 to +125	°C	
Tj	Maximum junction temperature		150	°C
	IEC61000-4-2 (ESD)	air discharge ontact discharge	±20 ±15	KV
	IEC61000-4-4 (EFT)		40	Α

#### Electrical Characteristics Ratings at 25°C ambient temperature unless otherwise specified.VF = 0.9V at IF = 10mA

Device	V <sub>RWM</sub> (V)	I <sub>R</sub> (uA) @ V <sub>RWM</sub>	V <sub>BR</sub> (V	-	Ι <sub>τ</sub>	V <sub>C</sub> (V) @ I <sub>PP</sub> =3 A*	V <sub>С</sub> (V) @ Мах І <sub>РР</sub> *	I <sub>PP</sub> (A)*	P <sub>PK</sub> (W)*	C (pF)	R <sub>(dynamic)</sub> @16A(TLP)
	Max	Max	Min	Max	mA	Тур	Max	Max	Max	Тур	Тур
LESD8D7.0CAT5G	7.0	1.0	7.2	9	1.0	13	18	20	360	8	0.24

<sup>\*</sup>Surge current waveform per Figure 2.

#### **Typical Characteristics**



**Fig1.TLP Measurement** 

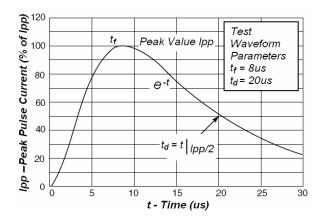


Fig2. Pulse Waveform

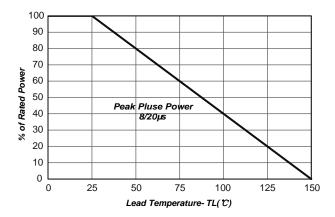
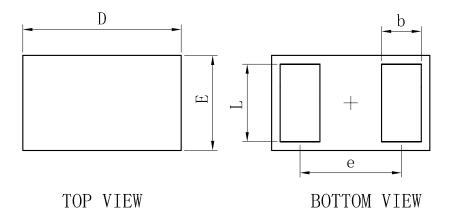


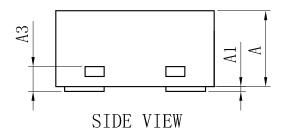
Fig3.Power Derating Curve

<sup>1.</sup>  $V_{BR}$  is measured with a pluse test current  $I_T$  at an ambient temperature of 25  $^\circ\!\!\!\!\!\!\!^\circ$  .

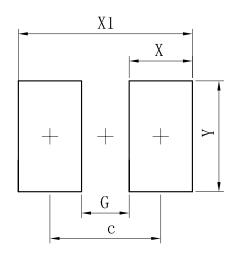
#### **Outline and Dimensions**



DFN1006-2L(SOD-882)						
Dim	Min	Тур	Max			
D	0. 95	1.00	1.05			
Е	0. 55	0.60	0. 65 - 0. 54			
е	_	0.64				
L	0.44	0.49				
b	0.20	0. 25	0.30			
A	0.43	0.48	0. 53			
A1	0	1				
A3	0. 127REF.					
All Dimensions in mm						



# **Soldering Footprint**



Dimensions	(mm)
С	0.70
G	0.30
X	0.40
X1	1.10
Y	0.70

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