

## LESD8D3.3T5G ESD PROTECTION DIODE

### **Discription**

The LESD8D3.3T5G is designed to protect voltage sensitive components from ESD. Excellent clamping capability, low leakage, and fast response time provide best in class protection on designs that are exposed to ESD. Because of its small size, it is suited for use in cellular phones, MP3 players, digital cameras and many other portable applications where board space is at a premium.

## **Applications**

- I Cellular phones audio
- I MP3 players
- I Digital cameras
- I Portable applicationss
- I mobile telephone

#### **Features**

Small Body Outline Dimensions:

0.039" x 0.024"(1.0 mm x 0.60 mm)

- Low Body Height: 0.020" (0.50 mm)
- Stand-off Voltage: 3.3 V 12 V
- 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
- These are Pb-Free Devices
- We declare that the material of product compliance with RoHS requirements.

## LESD8D3.3T5G





### **Ordering information**

Device	Marking	Shipping
LESD8D3.3T5G	Е	10000/Tape&Reel

#### **MAXIMUM RATINGS**

Rating	Symbol	Value	Unit
IEC 61000-4-2 (ESD) Air Contact Contact discharge		±15 ±8	kV kV
ESD Voltage Per Human Body Model		16	kV
Total Power Dissipation on FR-5 Board (Note 1) @ T <sub>A</sub> =25°C	PD	150	mW
Junction and Storage Temperature Range	TJ,TSTG	-55 to 150	$^{\circ}$
Lead Solder Temperature – Maximum (10 Second Duration)	TL	260	$^{\circ}$ C

Stresses exceeding Maximum Ratings may damage the device. Maximum Rating are stress ratings only. Functional operation above the Recommended Operating Conditions is not implied. Extended exposure to stresses above the Recommended Operating Conditions may affect device reliability.

1. FR-5 = 1.0\*0.75\*0.62 in.

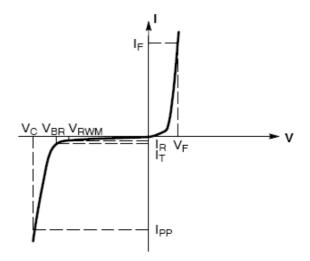


# LESD8D3.3T5G

#### **ELECTRICAL CHARACTERISTICS**

(T<sub>A</sub> = 25°C unless otherwise noted)

	<del> </del>
Symbol	Parameter
I <sub>PP</sub>	Maximum Reverse Peak Pulse Current
V <sub>C</sub>	Clamping Voltage @ IPP
V <sub>RWM</sub>	Working Peak Reverse Voltage
I <sub>R</sub>	Maximum Reverse Leakage Current @ V <sub>RWM</sub>
V <sub>BR</sub>	Breakdown Voltage @ I <sub>T</sub>
I <sub>T</sub>	Test Current
I <sub>F</sub>	Forward Current
V <sub>F</sub>	Forward Voltage @ I <sub>F</sub>
P <sub>pk</sub>	Peak Power Dissipation
С	Max. Capacitance @V <sub>R</sub> = 0 and f = 1 MHz



Uni-Directional TVS

ELECTRICAL CHARACTERISTICS (T<sub>A</sub>=25°C unless otherwise noted, VF=0.9V Max. @ IF=10Ma for all types)

	$V_{RWM}$	I <sub>R</sub>	$V_{BR}$	Ι <sub>Τ</sub>	I <sub>PP</sub>	Vc	$P_{PK}$	С
	(V)	( µ A)	(V)	(mA)	(A)	(V)	(W)	(pF)
Device		@	@ I <sub>T</sub>			@ Max I <sub>PP</sub>	(8*20 µs)	
		$V_{RWM}$	(Note 2)		(Note 3)	(Note 3)		
	Max	Max	Min		Max	Max	Тур	Тур
LESD8D3.3T5G	3.3	2.5	5.0	1.0	9.8	10.4	102	80

Other voltage available upon request.

- 3. Surge current waveform per Figure 3.



6.4 6.3

## LESD8D3.3T5G

### BREAKDOWN VOLTAGE (VOLTS) (VZ @ IZ) 7.4 7.3 7.2 7.1 7.0 6.9 6.8 6.7 6.6 6.5

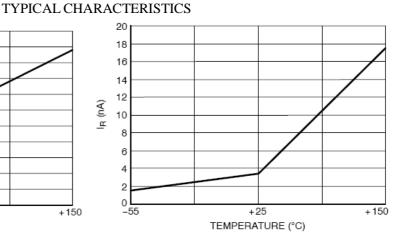
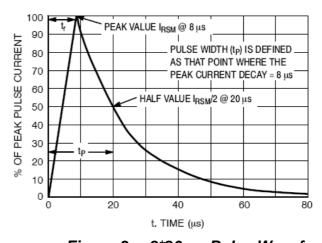


Figure 1. Typical Breakdown Voltage versus Temperature

+25

TEMPERATURE (°C)

Fig 2. Typical Leakage Current versus **Temperature** 



+150

Figure 3. 8\*20 μs Pulse Waveform

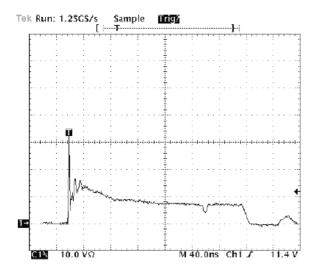


Figure 4. Positive 8kV contact per IEC 61000-4-2-LESD8D3.3T5G

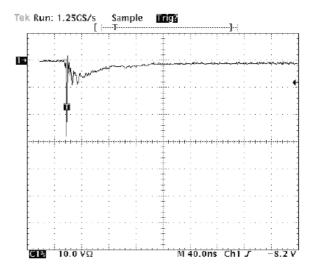


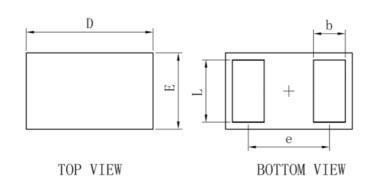
Fig 5. Negative 8kV contact per IEC 61000-4-2-LESD8D3.3T5G



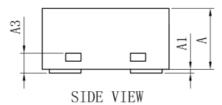
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#### **OUTLINE AND DIMENSIONS**

# SOD882

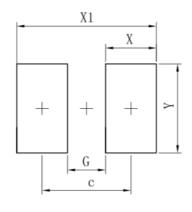


S0D882				
Dim	Min	Тур	Max	
D	0.95	1.00	1.05	
Е	0.55	0.60	0.65	
е	-	0.64	-	
L	0.44	0.49	0.54	
b	0.20	0.25	0.30	
A	0.43	0.48	0.53	
A1	0	-	0.05	
A3	0. 127REF.			
All Dimensions in mm				



### **SOLDERING FOOTPRINT**

# SOD882



Dimensions	(mm)
Dimensions	(111111)
С	0.70
G	0.30
X	0.40
X1	1.10
Y	0, 70

单击下面可查看定价,库存,交付和生命周期等信息

- >>LRC(乐山无线电)
- 〉〉点击查看相关商品