

# LESD8D5.0N3T5G 2-Line ESD protection

### **Discription**

The LESD8D5.0N3T5G 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.

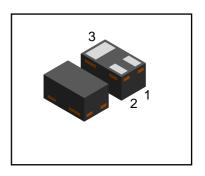
### **Applications**

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

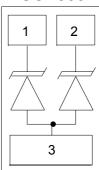
### **Features**

- Small Body Outline Dimensions:
  - 0.039" x 0.024"(1.0 mm x 0.60 mm)
- Low Body Height: 0.020" (0.50 mm)
- Protects two data lines
- Working voltage: 5V
- 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.
- S- Prefix for Automotive and Other Applications Requiring Unique Site and Control Change Requirements; AEC-Q101 Qualified and PPAP Capable.

### LESD8D5.0N3T5G



#### **SOT883**



### Ordering information

Device	Marking	Shipping		
LESD8D5.0N3T5G	68	10000/Tape&Reel		

#### **MAXIMUM RATINGS**

Rating	Symbol	Value	Unit	
IEC 61000-4-2 (ESD) Air discharge Contact discharge		±20 ±16	kV kV	
ESD Voltage Per Human Body Model		16	kV	
Total Power Dissipation on FR-5 Board (Note 1)	PD	250	mW	
@ T <sub>A</sub> =25℃				
Junction and Storage Temperature Range	TJ,TSTG	-55 to 150	$^{\circ}$ C	
Lead Solder Temperature – Maximum (10	TL	260	$^{\circ}$	
Second Duration)				

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.

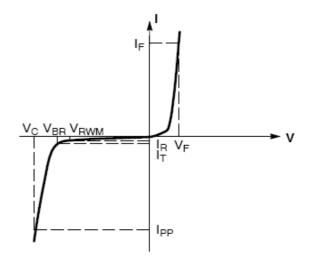


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#### **ELECTRICAL CHARACTERISTICS**

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

Symbol	Parameter
I <sub>PP</sub>	Maximum Reverse Peak Pulse Current
Vc	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>
$P_{pk}$	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=1.25VMax. @ IF=10mA)

Device	$V_{RWM}$	I <sub>R</sub>	$V_{BR}$	I <sub>T</sub>	I <sub>PP</sub>	Vc	$P_{PK}$	С
	(V)	( µ A)	(V)	(mA)	(A)	(V)	(W)	(pF)
		@	@ 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
LESD8D5.0N3T5G	5.0	1.0	6.0	1.0	7	11.0	77	40

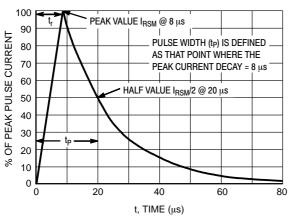
Other voltage available upon request.

- 3. Surge current waveform per Figure 1.



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#### TYPICAL CHARACTERISTICS



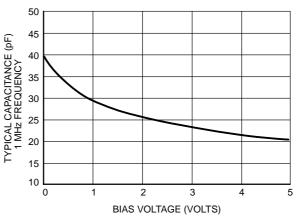
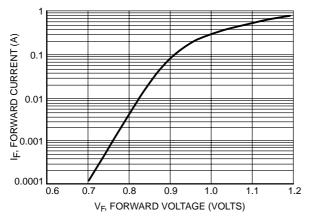


Figure 1.  $8 \times 20~\mu s$  Pulse Waveform

Figure 2. Capacitance



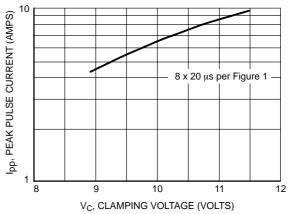


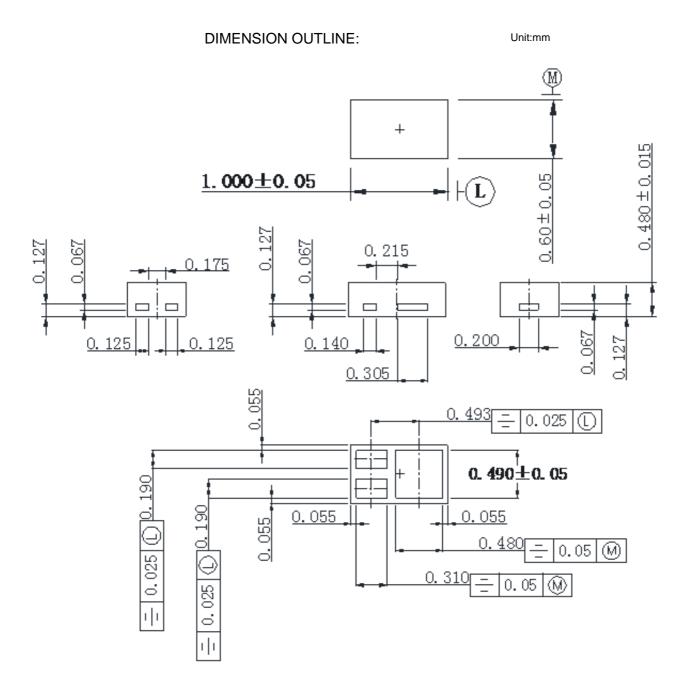
Figure 3. Forward Voltage

Figure 4. Clamping Voltage versus Peak Pulse Current



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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)