

LESD8LVL5.0CT5G ESD PROTECTION DIODE

Discription

The LESD8LVL5.0CT5G is designed to protect voltage sensitive components from ESD.

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. Because of its small size, it is suited for use in cellular phones, digital cameras and many other portable applications where board space is at a premium.

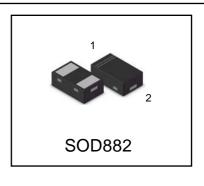
Applications

- I Cellular phones audio
- I Digital cameras
- I Portable applications
- I Mobile telephone

Features

- I Low Leakage
- I Response Time is Typically < 1 ns
- I IEC61000-4-2 Level 4 ESD Protection
- I We declare that the material of product compliant with RoHS requirements and Halogen Free.

LESD8LVL5.0CT5G





Ordering information

Device	Marking	Shipping
LESD8LVL5.0CT5G	QL	10000/Tape&Reel

MAXIMUM RATINGS

Rating	Symbol	Value	Unit
IEC 61000-4-2 (ESD) Air discharge Contact discharge		±20 ±20	kV kV
Total Power Dissipation on FR-5 Board (Note 1) @ T_A =25 $^{\circ}$ C	PD	200	mW
Junction and Storage Temperature Range	TJ,TSTG	-55 to 150	$^{\circ}$ C
Lead Solder Temperature – Maximum (10 Second Duration)	TL	260	$^{\circ}$

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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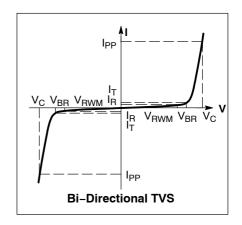


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ELECTRICAL CHARACTERISTICS

(T_A = 25°C unless otherwise noted)

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}			
V_{BR}	Breakdown Voltage @ I _T			
Ι _Τ	Test Current			
P_{pk}	Peak Power Dissipation			
С	Capacitance @ V _R = 0 and f = 1.0 MHz			

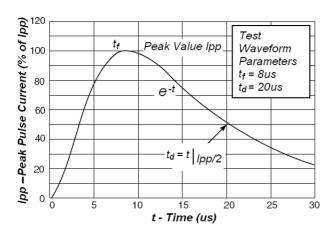


ELECTRICAL CHARACTERISTICS

Device	V _{RWM} (V)	I _R (μΑ) @ V _{RWM}	V _{BR} (V (Not		I _T	V _C (V) @ I _{PP} = 1 A (Note 3)	V _C (V) @ I _{PP} = 3 A (Note 3)	V _C (V) @MAX I _{PP} (Note 3)	I _{PP} (A) (Note 3)	P _{PK} (W) (Note 3)	C (p	oF)
	Max	Max	Min	Max	mA	Max	Max	Max	Max	Max	Тур	Max
LESD8LVL5.0CT5G	5	0.5	6	9	1.0	12	16	19	4	50	0.25	0.3

Other voltage available upon request.

- 2. V_{BR} is measured with a pulse test current IT at an ambient temperature of 25 $^{\circ}{\!\!\!^{\circ}}{\!\!\!^{\circ}}$
- 3. Surge current waveform per Figure 1.



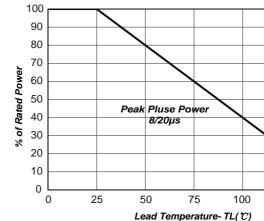


Fig1. Pulse Waveform

Fig2.Power Derating Curve

125

150



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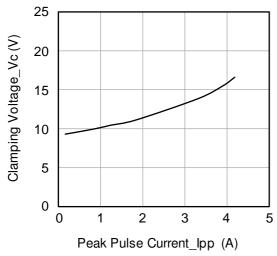


Fig3 .Clamping Voltage vs. Peak Pluse Current

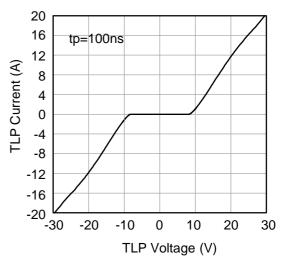
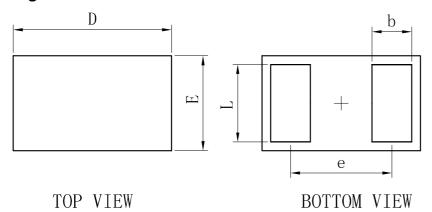


Fig 4. TLP Measurement

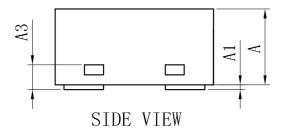


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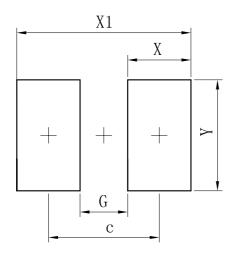
Package Outline Dimension



SOD882						
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			
А3	A3 0. 127REF.					
All Dimensions in mm						



Suggested Pad layout



Dimensions	(mm)
С	0.70
G	0.30
X	0.40
X1	1. 10
Υ	0.70

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