LESD8D12CAT5G ESD PROTECTION DIODE

Discription

The LESD8D12CAT5G 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.

LESD8D12CAT5G

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Applications

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

Features

- Small Body Outline Dimensions: 1.00 mm x 0.60 mm
- Low Body Height: 0.50 mm
- 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
- We declare that the material of product compliance with RoHS requirements.

Ordering information

Device	Shipping
LESD8D12CAT5G	10000/Tape&Reel

MAXIMUM RATINGS

Rating	Symbol	Value	Unit
IEC 61000-4-2 (ESD) Air Contact discharge		±30 ±30	kV kV
ESD Voltage Per Human Body Model		16	kV
Total Power Dissipation on FR-5 Board (Note 1) @ T_A=25℃	PD	200	mW
Junction and Storage Temperature Range	TJ,TSTG	-55 to 150	℃
Lead Solder Temperature – Maximum (10 Second Duration)	TL	260	℃

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.

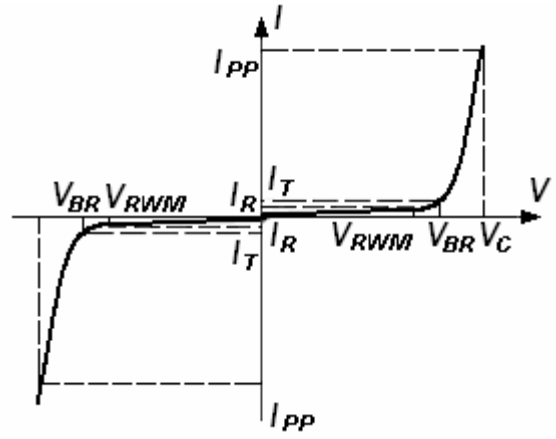
1. FR-5 = 1.0*0.75*0.62 in.

LESD8D12CAT5G

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
I_T	Test Current
I_F	Forward Current
V_F	Forward Voltage @ I_F
P_{pk}	Peak Power Dissipation
C	Max. Capacitance @V_R = 0 and f = 1 MHz



ELECTRICAL CHARACTERISTICS

Device	V_{RWM} (V)	I_R (μA) @ 12V	V_{BR} (V) @ I_T = 1mA (Note 1)			V_C (V) @ I_{PP} = 7 A	I_{PP} (A)	P_{PK} (W) (Note 2)	C (pF)
	Max	Max	Min	Typ	Max	Max	Max	Max	Max
LESDD8D12CAT5G	12	1.0	13.8	15	17.5	25	8	200	25

1. V_{BR} is measured with a pulse test current IT at an ambient temperature of 25℃
2. Surge current waveform per Figure 1.

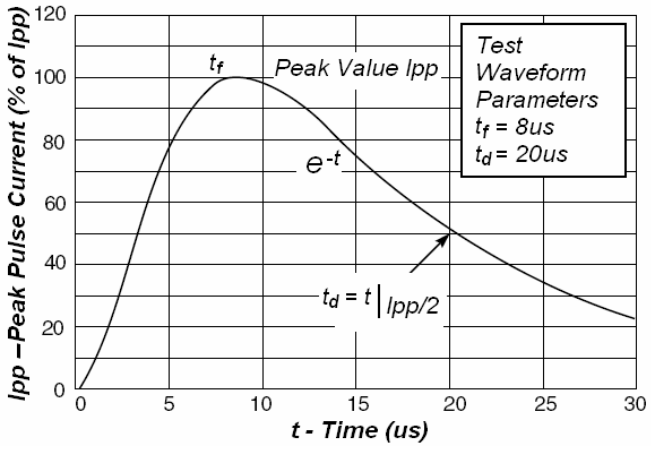


Fig1. Pulse Waveform

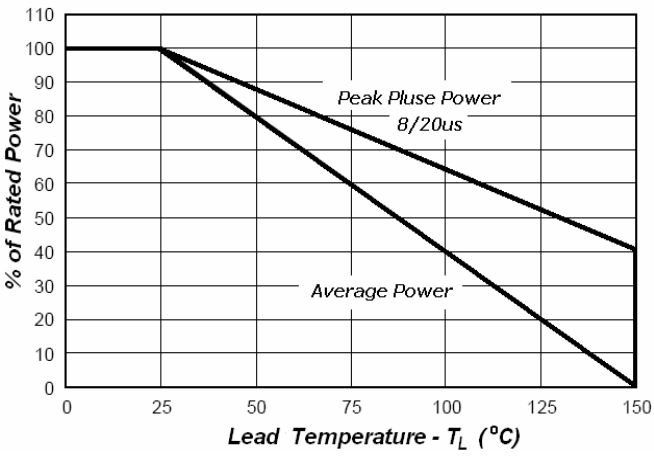


Fig2 Power Derating

OUTLINE AND DIMENSIONS

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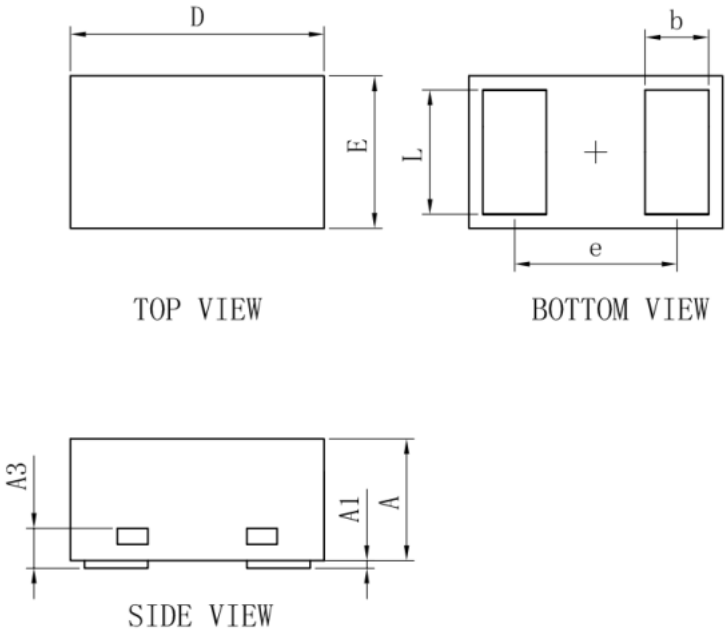

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Dim	Min	Typ	Max
D	0.95	1.00	1.05
E	0.55	0.60	0.65
e	–	0.64	–
L	0.44	0.49	0.54
b	0.20	0.25	0.30
A	0.43	0.48	0.53
A1	0	–	0.05
A3	0.127REF.		
All Dimensions in mm			

SOLDERING FOOTPRINT

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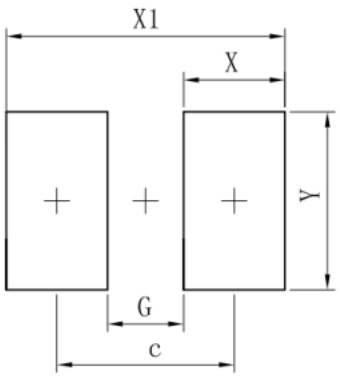

Dimensions	(mm)
c	0.70
G	0.30
X	0.40
X1	1.10
Y	0.70

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)