

S-LESD8D24CAT5G ESD PROTECTION DIODE

Discription

The S-LESD8D24CAT5G 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, digital cameras and many other portable applications where board space is at a premium.

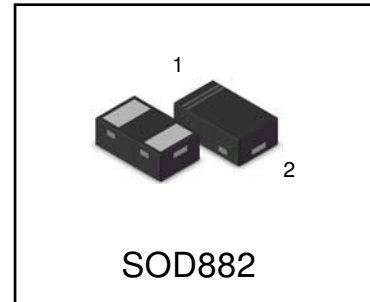
Applications

- | Cellular phones audio
- | Digital cameras
- | Portable applications
- | 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 per Human Body Model
- | IEC61000-4-2 Level 4 ESD Protection
- | We declare that the material of product compliance with RoHS requirements and Halogen Free.
- | S-prefix for automotive and other applications requiring unique site and control change requirements ; AEC-Q101 qualified and PPAP capable.

S-LESD8D24CAT5G



Ordering information

Device	Marking	Shipping
S-LESD8D24CAT5G	1A	10000/Tape&Reel

MAXIMUM RATINGS

Rating	Symbol	Value	Unit
IEC 61000-4-2 (ESD) Air Contact Contact discharge		±30 ±30	kV kV
Junction and Storage Temperature Range	TJ,TSTG	-55 to 150	°C
Lead Solder Temperature – Maximum (10 Second Duration)	TL	260	°C

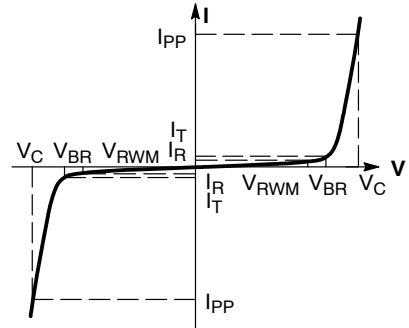
Stresses exceeding Maximum Ratings may damage the device. Maximum Rating are stress ratings only. Functional operation above the Recommended Operating Conditions is not implied. Extended exposure to stresses above the Recommended Operating Conditions may affect device reliability.

S-LESD8D24CAT5G

Electrical Parameter

($T_A = 25^\circ\text{C}$ 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
P_{pk}	Peak Power Dissipation
C	Capacitance @ $V_R = 0$ and $f = 1.0$ MHz



Electrical Parameter ($T_A = 25^\circ\text{C}$ unless otherwise noted)

Device	V_{RWM} (V)	I_R (μA) @ V_{RWM}	V_{BR} (V) * @ $I_T = 1\text{mA}$		I_{PP} (A) **	V_C (V) ** @ $I_{PP} = 1\text{A}$	V_C (V) ** @ $I_{PP} = 8\text{A}$	P_{PK} (W) **	C (pF) $V_R = 0\text{V}, f = 1\text{MHz};$
	Max	Max	Min	Max	Max	Max	Max	Max	Max
S-LESD8D24CAT5G	24	0.1	25	32	8	32	42	350	35

* V_{BR} is measured with a pulse test current I_T at an ambient temperature of 25°C .

** Surge current waveform per Figure 1.

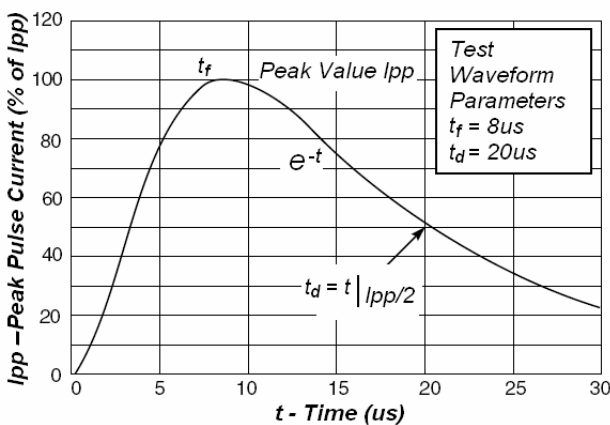


Fig1. Pulse Waveform

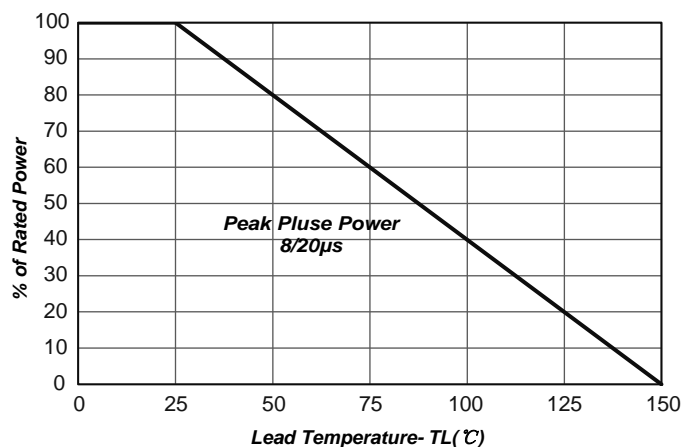
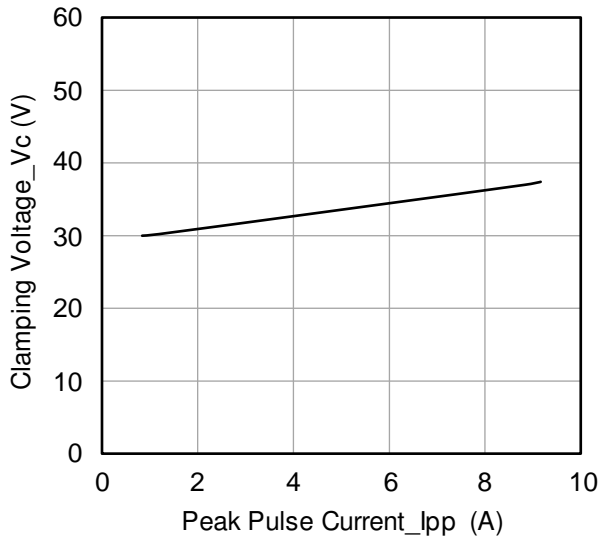
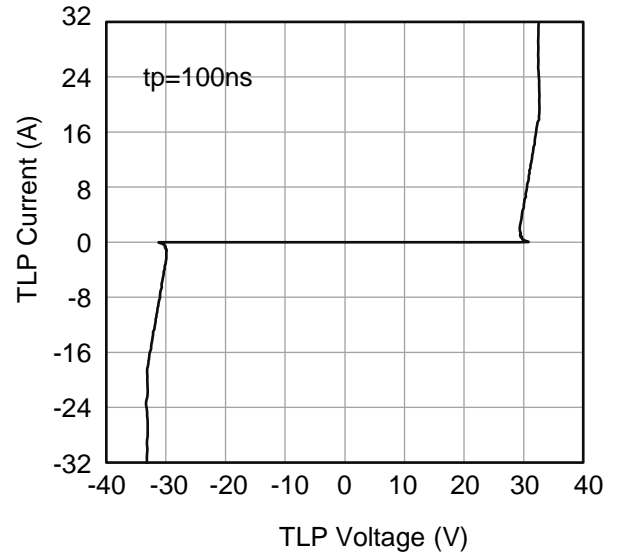


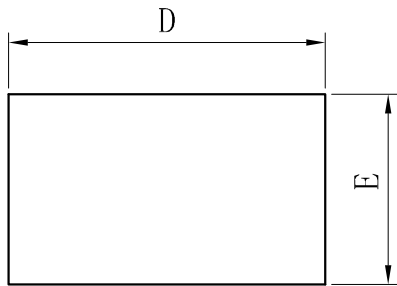
Fig2. Power Derating Curve

S-LESD8D24CAT5G**Fig 3. Clamping Voltage vs. Peak Pulse Current****Fig 4. TLP Measurement**

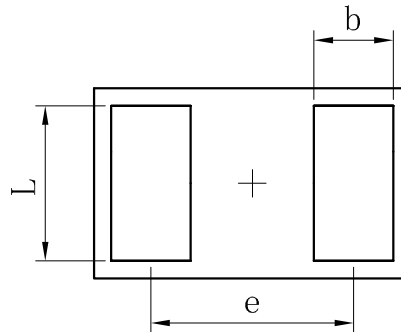
S-LESD8D24CAT5G

OUTLINE AND DIMENSIONS

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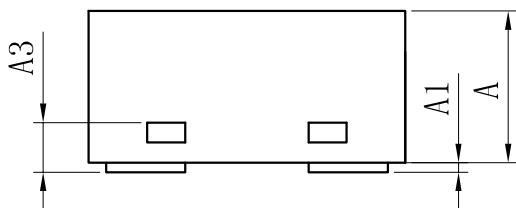


TOP VIEW



BOTTOM VIEW

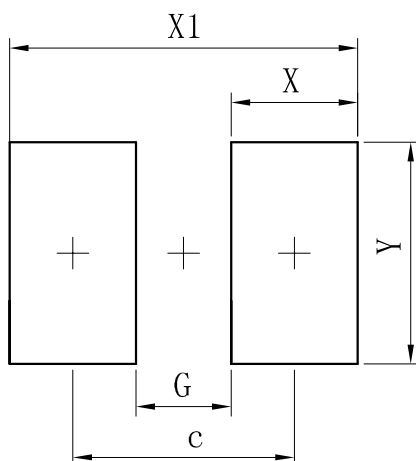
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Dim	Min	Typ	Max
D	0.95	1.00	1.05
E	0.55	0.60	0.65
e	-	0.64	-
L	0.44	0.49	0.54
b	0.20	0.25	0.30
A	0.43	0.48	0.53
A1	0	-	0.05
A3	0.127REF.		
All Dimensions in mm			



SIDE VIEW

SOLDERING FOOTPRINT

SOD882



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

DISCLAIMER

- Curve guarantee in the specification. The curve of test items with electric parameter is used as quality guarantee. The curve of test items without electric parameter is used as reference only.
- Before you use our Products for new Project, you are requested to carefully read this document and fully understand its contents. LRC shall not be in any way responsible or liable for failure, malfunction or accident arising from the use of any LRC's Products against warning, caution or note contained in this document.
- All information contained in this document is current as of the issuing date and subject to change without any prior notice. Before purchasing or using LRC's Products, please confirm the latest information with a LRC sales representative.

单击下面可查看定价，库存，交付和生命周期等信息

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