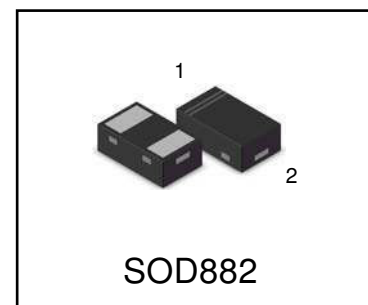


LESD8D5.0CAT5G

ESD PROTECTION DIODE

1. FEATURES

- Low Leakage
- Response Time is Typically < 1 ns
- Complies with IEC 61000-4-2 standards: Air discharge: $\pm 30\text{kV}$
Contact discharge: $\pm 30\text{kV}$
- We declare that the material of product compliance with RoHS requirements and Halogen Free.



2. APPLICATIONS

- Thunderbolt interface
- USB3.1 and USB3.0 interfaces
- USB Type-C interface
- DisplayPort interface
- Hand held portable applications
- Mobile Phones
- Consumer electronics



3. DEVICE MARKING AND ORDERING INFORMATION

Device	Marking	Shipping
LESD8D5.0CAT5G	AK	10000/Tape&Reel

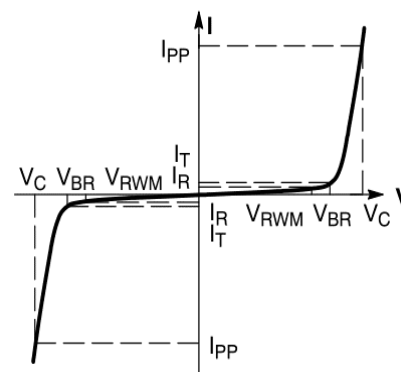
4. MAXIMUM RATINGS($T_a = 25^\circ\text{C}$)

Parameter	Symbol	Limits	Unit
IEC 61000-4-2 (ESD) Contact		± 30	KV
Air		± 30	
Peak pulse power@8/20 μs (Note 1)	PPP	69	W
Peak pulse current @8/20 μs (Note 1)	IPP	5.5	A
Junction Temperature Range	TJ	-55~+150	$^\circ\text{C}$
Storage Temperature Range	Tstg	-55~+150	$^\circ\text{C}$

Note 1.Surge current waveform per Figure 1 according to IEC 61000-4-5.

5. ELECTRICAL CHARACTERISTICS (Ta= 25°C)

Symbol	Parameter
IPP	Maximum Reverse Peak Pulse Current
VC	Clamping Voltage @ IPP
VRWM	Working Peak Reverse Voltage
IR	Maximum Reverse Leakage Current @ VRWM
VBR	Breakdown Voltage @ IT
IT	Test Current
Ppk	Peak Power Dissipation
C	Capacitance @ VR = 0 and f = 1.0 MHz

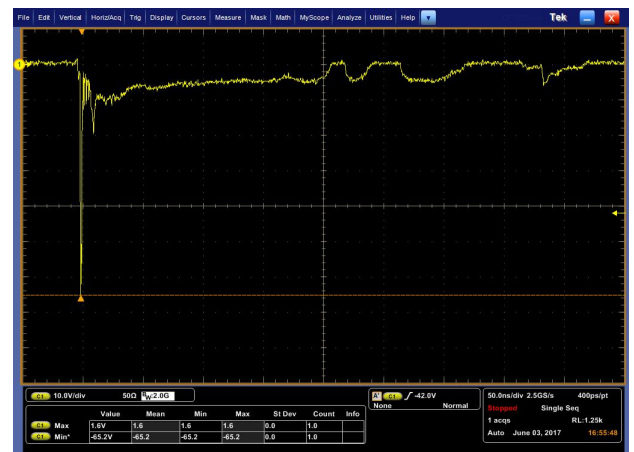
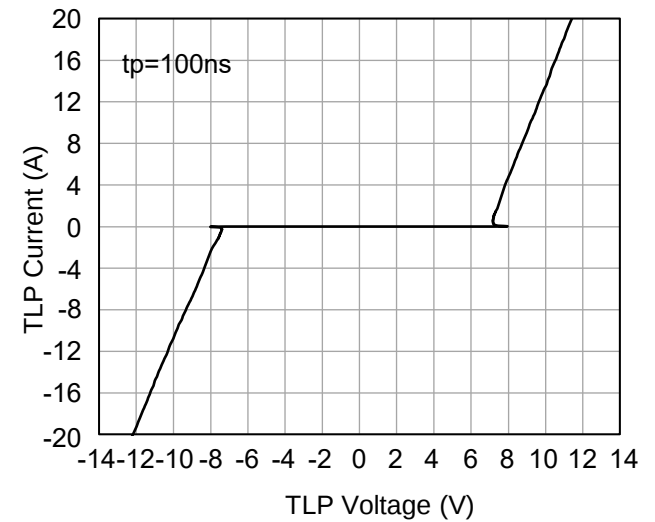
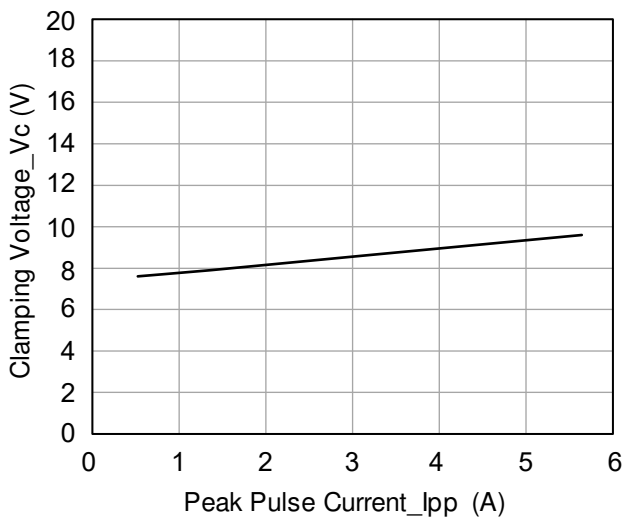
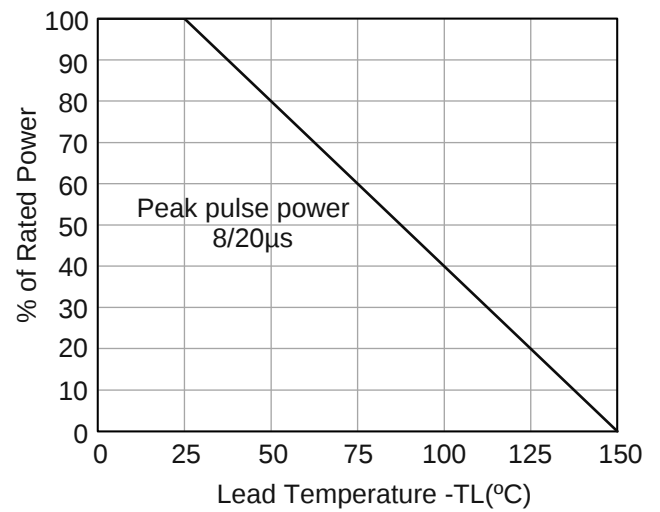
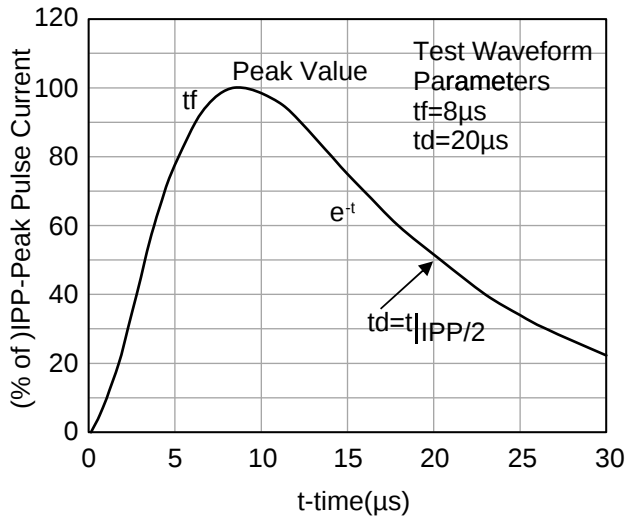


6. ELECTRICAL CHARACTERISTICS (Ta= 25°C)

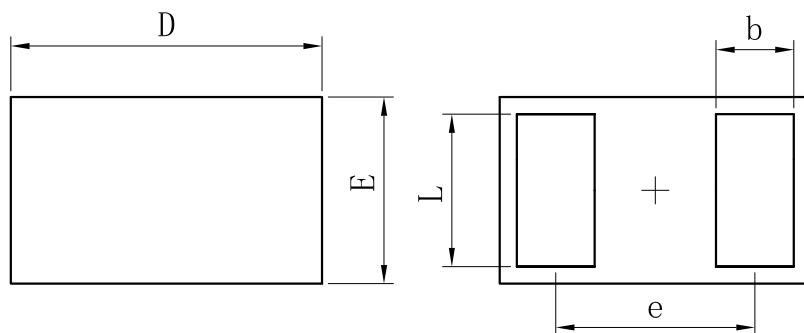
Characteristic	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Reverse stand-off voltage	VRWM				5	V
Breakdown Voltage	VBR	IT = 1mA	5.6		8.0	V
Reverse leakage current	IR	VR = 3.5V VR = 5V			300 500	nA
Clamping Voltage(Note 1)	VC	IPP = 1A, tp=8/20μs IPP = 5.5A, tp=8/20μs			9.8 12.5	V
Junction Capacitance	Cj	VR = 0V, f = 1MHz			20	pF

Note 1.Surge current waveform per Figure 1 according to IEC 61000-4-5.

7. ELECTRICAL CHARACTERISTICS CURVES

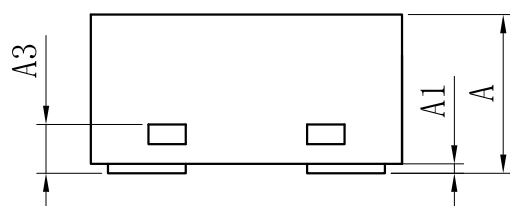


8.OUTLINE AND DIMENSIONS



TOP VIEW

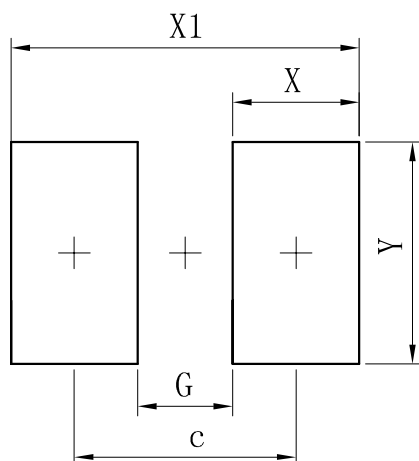
BOTTOM VIEW



SIDE VIEW

SOD882			
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			

9.SOLDERING FOOTPRINT



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.
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