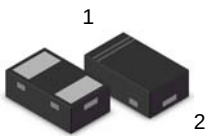
S-LESD8LL3.3T5G ESD PROTECTION DIODE

Discription

The S-LESD8LL3.3T5G 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.

S-LESD8LL3.3T5G



SOD882

Applications

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

Features

- 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 compliant 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.

Ordering information

Device	Marking	Shipping
S-LESD8LL3.3T5G	Q7	10000/Tape&Reel

MAXIMUM RATINGS

Rating	Symbol	Value	Unit
IEC 61000-4-2 (ESD) Air discharge Contact discharge		±16 ±16	kV 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	℃

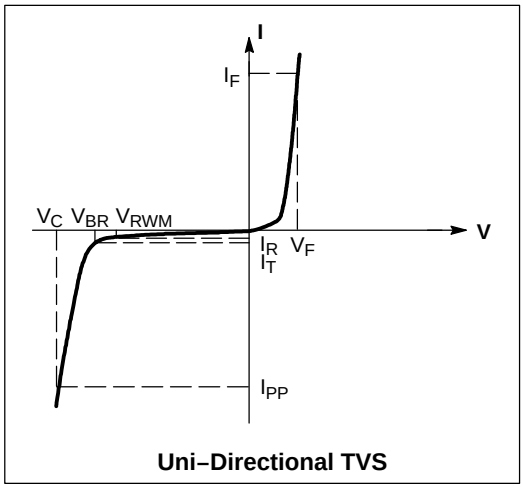
Stresses exceeding Maximum Ratings may damage the device. Maximum Rating are stress ratings only. Functional operation above the Recommended Operating Conditions is not implied. Extended exposure to stresses above the Recommended Operating Conditions may affect device reliability.

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

S-LESD8LL3.3T5G

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	Capacitance @ V_R = 0 and f = 1.0 MHz



Uni–Directional TVS

ELECTRICAL CHARACTERISTICS

Device	V_{RWM} (V)	I_R (μA) @ V_{RWM}	V_{BR} (V) @ I_T = 1 mA (Note 1)		V_C (V) @ I_{PP} = 1 A (Note 2)	V_C (V) @MAX I_{PP} (Note 2)	I_{PP}(A) (Note 2)	P_{PK}(W) (Note 2)	C (pF)	
	Max	Max	Min	Max	Max	Max	Max	Max	Typ	Max
S-LESD8LL3.3T5G	3.3	0.5	4.5	7.8	10	14	5	70	0.5	0.6

Other voltage available upon request.

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

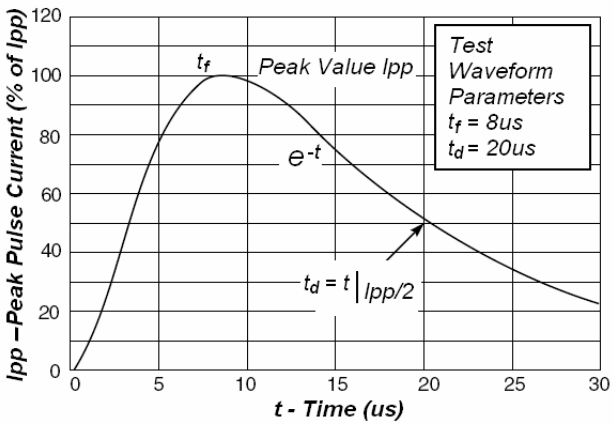


Fig1. Pulse Waveform

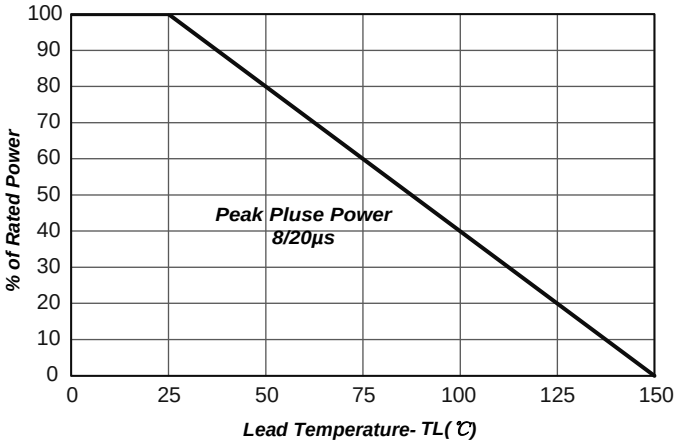
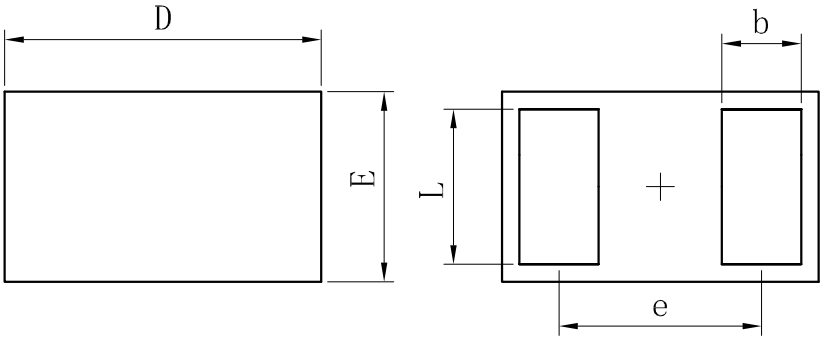


Fig2.Power Derating Curve

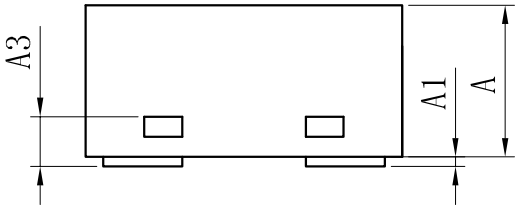
S-LESD8LL3.3T5G

OUTLINE AND DIMENSIONS



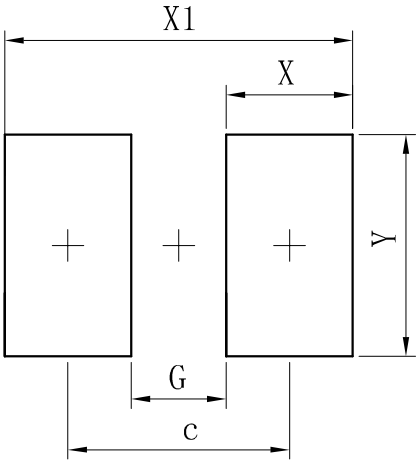
TOP VIEW　　BOTTOM VIEW

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			



SIDE VIEW

SOLDERING FOOTPRINT



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