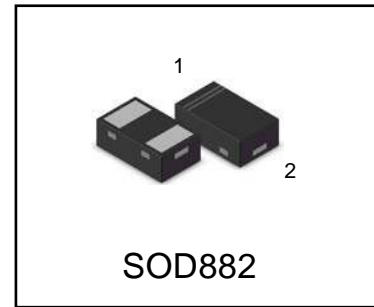


# Transient Voltage Suppressors for ESD Protection

## General Description

The S-LESD8D15CAT5G is designed to protect voltage sensitive components from ESD and transient voltage events. 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.

**S-LESD8D15CAT5G**



## Applications

- Cellular phones
- Portable devices
- Digital cameras
- Power supplies



## Features

- Small Body Outline Dimensions
- Low Body Height
- Peak Power up to 120 Watts @ 8 x 20  $\mu$ s Pulse
- Low Leakage
- Response Time is Typically < 1 ns
- IEC61000-4-2 Level 4 ESD Protection
- IEC61000-4-4 Level 4 EFT Protection
- We declare that the material of product compliance with RoHS requirements.
- 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-LESD8D15CAT5G	U5	10000/Tape & Reel

## Absolute Ratings ( $T_{amb}=25^{\circ}C$ )

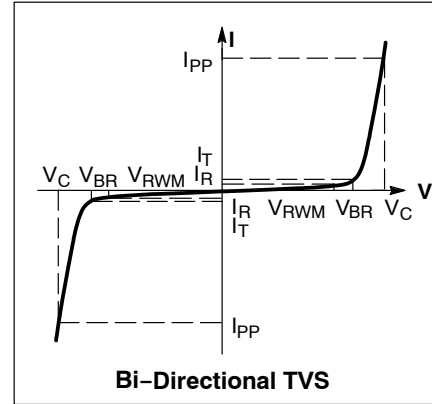
Symbol	Parameter	Value	Units	
$P_{PP}$	Peak Pulse Power ( $t_p = 8/20\mu s$ )	120	W	
$T_L$	Maximum lead temperature for soldering during 10s	260	$^{\circ}C$	
$T_{stg}$	Storage Temperature Range	-55 to +150	$^{\circ}C$	
$T_{op}$	Operating Temperature Range	-40 to +125	$^{\circ}C$	
$T_j$	Maximum junction temperature	150	$^{\circ}C$	
	IEC61000-4-2 (ESD)	air discharge contact discharge	$\pm 30$ $\pm 30$	KV
	IEC61000-4-4 (EFT)		40	A

# S-LESD8D15CAT5G

## 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

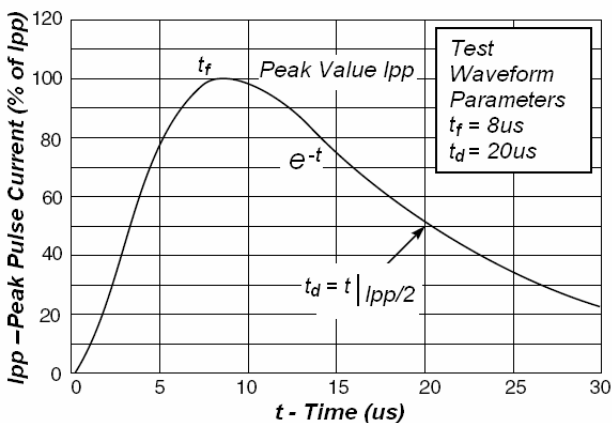


## Electrical Characteristics Ratings at 25°C ambient temperature unless otherwise specified. VF = 0.9V at IF = 10mA

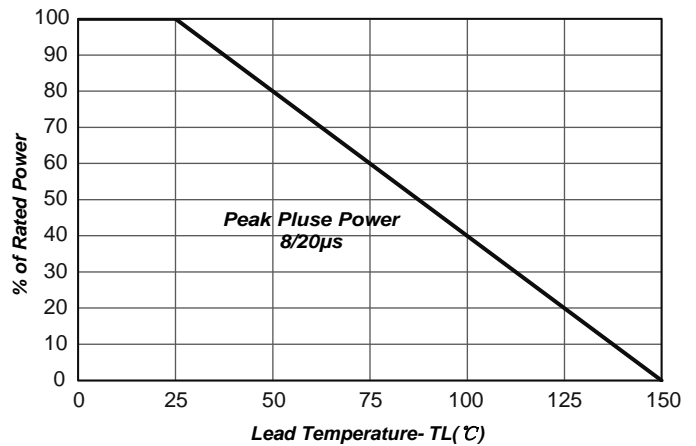
Device	$V_{RWM}$ (V)	$I_R$ (uA) @ $V_{RWM}$	$V_{BR}$ (V) @ $I_T$ (Note 1)		$I_T$	$V_C$ (V) @ $I_{PP}=1$ A*	$V_C$ (V) @ $I_{PP}=5$ A*	$I_{PP}$ (A)*	$P_{PK}$ (W)*	C (pF)	$R_{(dynamic)}$ (Ω) @ 16A(TLP)
	Max	Max	Min	Max	mA	Max	Max	Max	Max	Max	Typ
S-LESD8D15CAT5G	15	1	16	19	1	19	23	6	120	15	0.29

\*Surge current waveform per Figure 2.

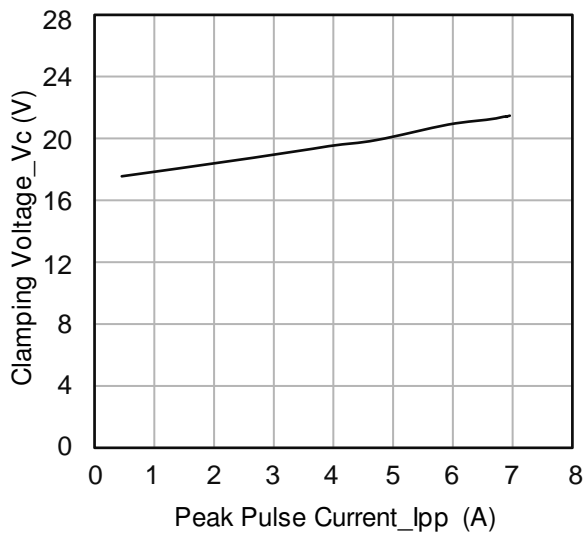
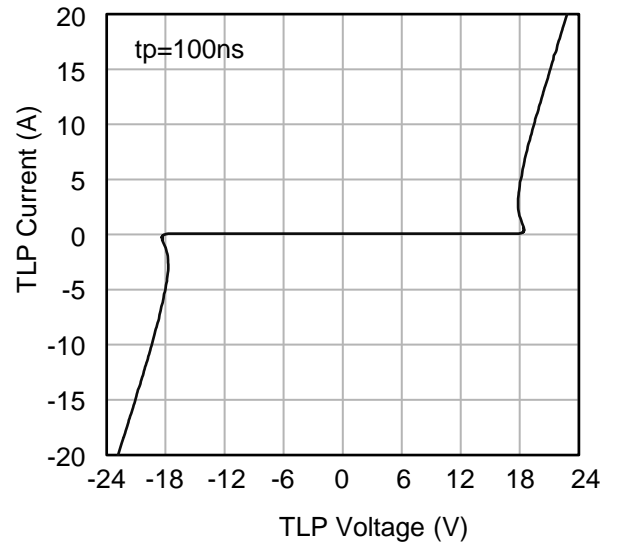
- $V_{BR}$  is measured with a pulse test current  $I_T$  at an ambient temperature of 25°C.



**Fig1. Pulse Waveform**

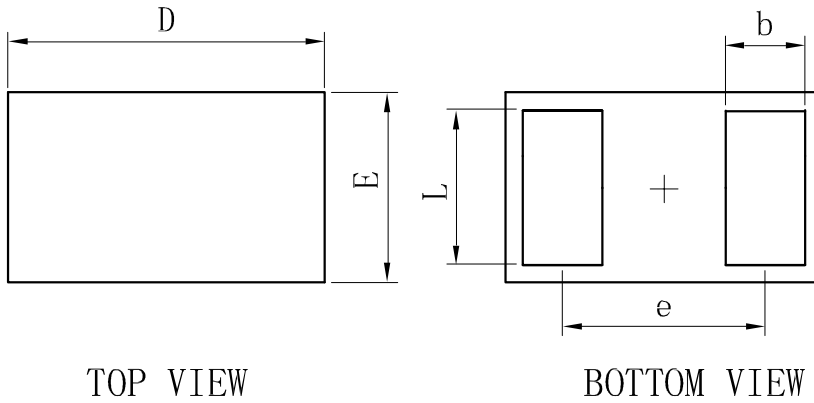


**Fig2. Power Derating Curve**

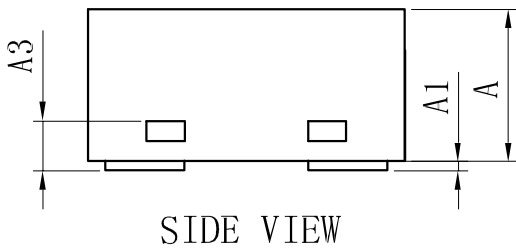
**S-LESD8D15CAT5G****Fig 3. Clamping Voltage vs. Peak Pulse Current****Fig 4. TLP Measurement**

# S-LESD8D15CAT5G

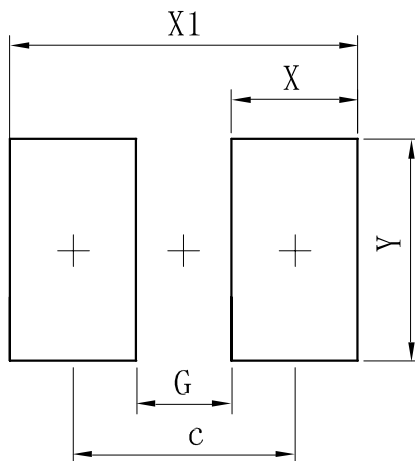
## OUTLINE AND DIMENSIONS



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			



## SOLDERING FOOTPRINT



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

**DISCLAIMER**

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- 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

[>>LRC\(乐山无线电\)](#)