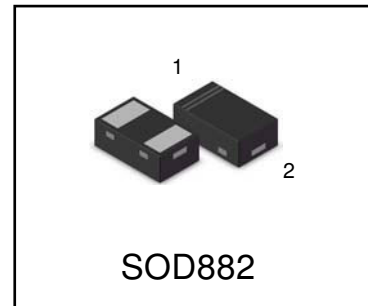


# LTVS8H5.0CAT5G

# LTVS8H5.0CAT5G

### Features

- Reverse stand-off voltage:  $\pm 5.0V$  Max
- Low clamping voltage
- Complies with IEC 61000-4-2 standards:  
     Air discharge:  $\pm 30kV$   
     Contact discharge:  $\pm 30kV$
- RoHS Compliant



### Ordering information

Device	Marking	Shipping
LTVS8H5.0CAT5G	S9	10000/Tape&Reel

### Absolute Maximum Ratings ( $T_A=25^{\circ}C$ unless otherwise specified)

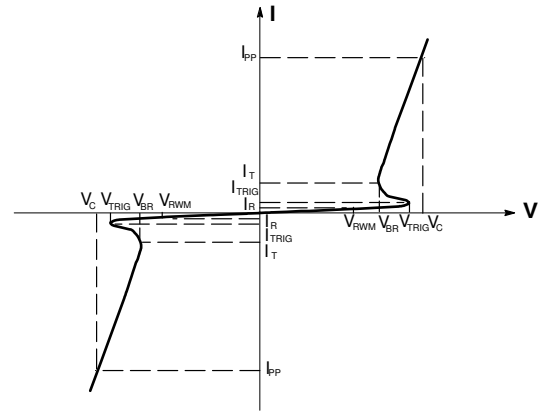
Parameter	Symbol	Value	Unit
Peak Pulse Power (8/20 $\mu s$ )	Ppk	500	W
Peak Pulse Current (8/20 $\mu s$ )	I <sub>PP</sub>	48	A
Operating Temperature Range	T <sub>J</sub>	-55 to +125	$^{\circ}C$
Storage Temperature Range	T <sub>stg</sub>	-55 to +150	$^{\circ}C$

# LTVS8H5.0CAT5G

## ELECTRICAL CHARACTERISTICS

(T<sub>A</sub> = 25°C unless otherwise noted)

Symbol	Parameter
I <sub>PP</sub>	Maximum Reverse Peak Pulse Current
V <sub>C</sub>	Clamping Voltage @ I <sub>PP</sub>
V <sub>RWM</sub>	Reverse standoff voltage
I <sub>R</sub>	Maximum Reverse Leakage Current @ V <sub>RWM</sub>
V <sub>BR</sub>	Breakdown Voltage @ I <sub>T</sub>
I <sub>T</sub>	Test Current
V <sub>TRIG</sub>	Reverse trigger voltage
I <sub>TRIG</sub>	Reverse trigger current



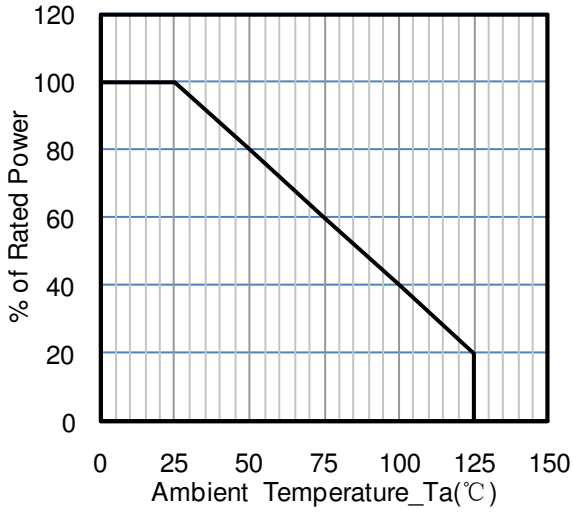
Bi-Directional TVS

## Electrical Characteristics (T<sub>A</sub>=25°C unless otherwise specified)

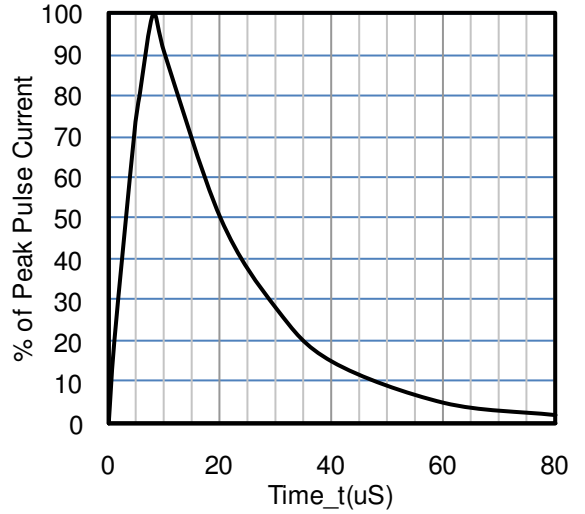
Parameter	Symbol	Min	Typ	Max	Unit	Test Condition
Reverse Working Voltage	V <sub>RWM</sub>			5	V	
Breakdown Voltage	V <sub>BR</sub>	5.3		6.5	V	I <sub>R</sub> = 1mA
Reverse Leakage Current	I <sub>R</sub>			0.3	μA	V <sub>RM</sub> = 5.0V
Clamping Voltage	V <sub>C</sub>			7	V	I <sub>PP</sub> = 10 A (8 x 20μs pulse)
				9	V	I <sub>PP</sub> = 30 A (8 x 20μs pulse)
				10	V	I <sub>PP</sub> = 48A (8 x 20μs pulse)
ESD Clamping Voltage	V <sub>Clamp</sub>		6.8		V	IEC 61000-4-2 ±8kV(I <sub>TLP</sub> = 16A), Contact mode, T = 25°C
Junction Capacitance	C <sub>J</sub>		100		pF	V <sub>R</sub> = 0V, f = 1MHz

# LTVS8H5.0CAT5G

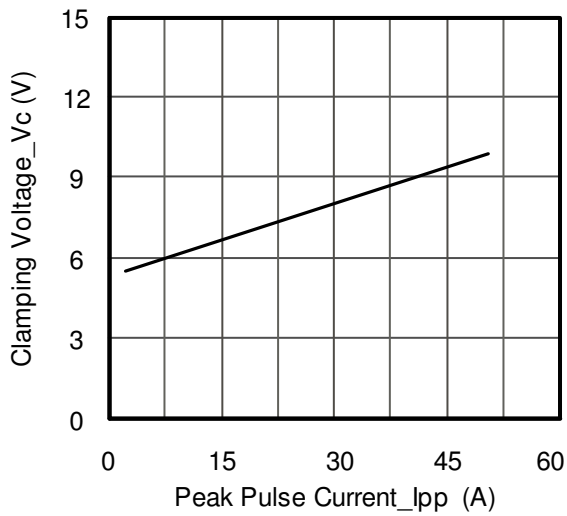
## Typical Performance Characteristics ( $T_A=25^\circ\text{C}$ unless otherwise Specified)



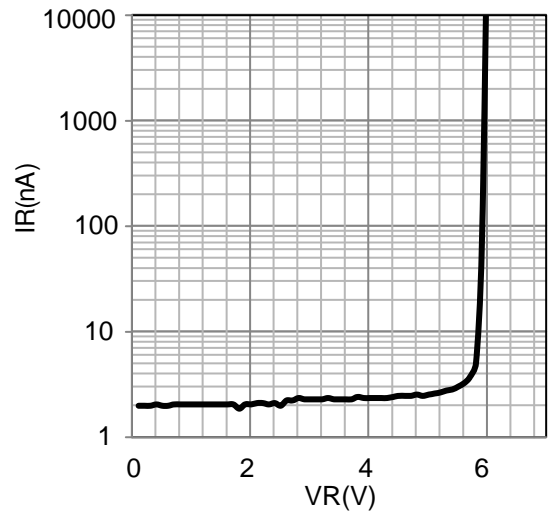
**Fig1. Power Derating Curve**



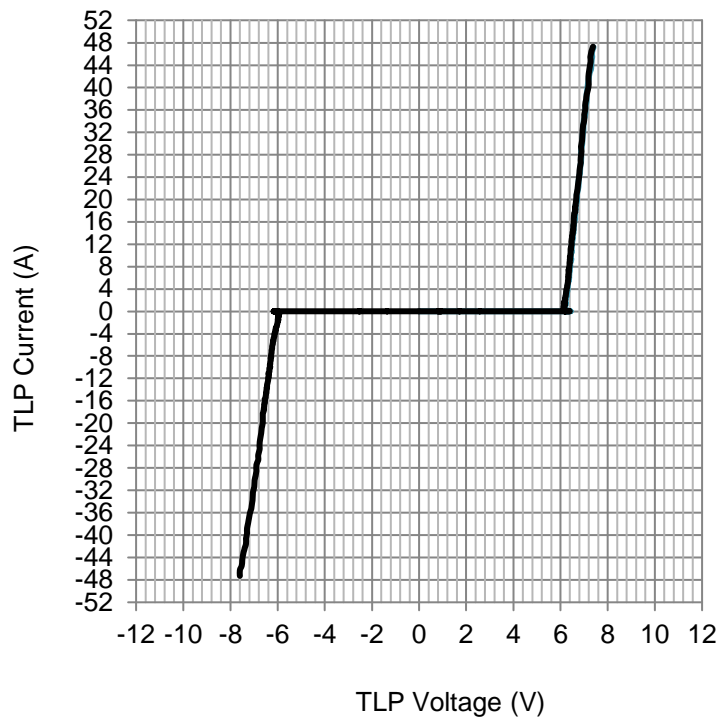
**Fig2. 8 X 20uS Pulse Waveform**



**Fig3. Clamping Voltage vs. Peak Pulse Current**

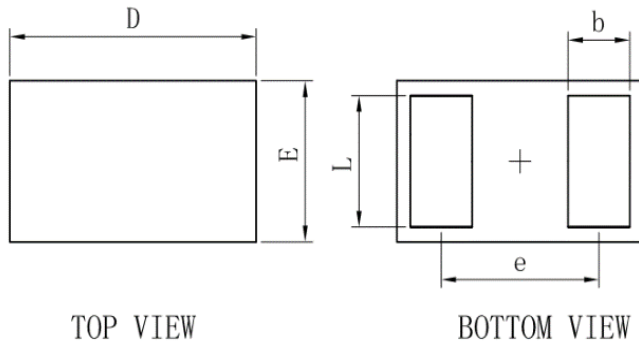


**Fig4. IR&VR**

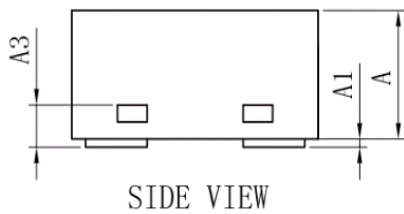
**LTVS8H5.0CAT5G****Fig 5. TLP Measurement**

# LTVS8H5.0CAT5G

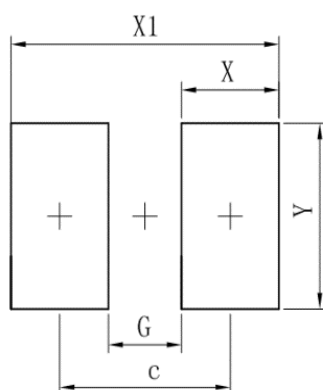
## OUTLINE AND DIMENSIONS



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

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