

LTVS32H5.0T1G

Features

- 5V uni-directional ESD diode
- Low clamping voltage
- Complies with IEC 61000-4-2 standards:
 - Air discharge: $\pm 30\text{kV}$
 - Contact discharge: $\pm 30\text{kV}$
- RoHS Compliant

LTVS32H5.0T1G



SOD-323HE



Ordering information

Device	Marking	Shipping
LTVS32H5.0T1G	05	3000/Tape&Reel

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

Parameter	Symbol	Value	Unit
Peak Pulse Power (8/20 μs)	Ppk	1500	W
Peak Pulse Current (8/20 μs)	I _{PP}	100	A
Operating Temperature Range	T _J	-55 to +125	$^\circ\text{C}$
Storage Temperature Range	T _{stg}	-55 to +150	$^\circ\text{C}$

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

Parameter	Symbol	Min	Typ	Max	Unit	Test Condition
Reverse Working Voltage	V _{RWM}			5	V	
Breakdown Voltage	V _{BR}	6		7.8	V	I _T = 1mA
Reverse Leakage Current	I _R			2	μA	V _R = 5V
Clamping Voltage	V _C			8.5	V	I _{PP} = 10A (8 x 20 μs pulse)
Clamping Voltage	V _C			17	V	I _{PP} = 80A (8 x 20 μs pulse)
Junction Capacitance	C _J			800	pF	V _R = 0V, f = 1MHz

Note: Electrical parameters are only for die, performance may alter after assembly.

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

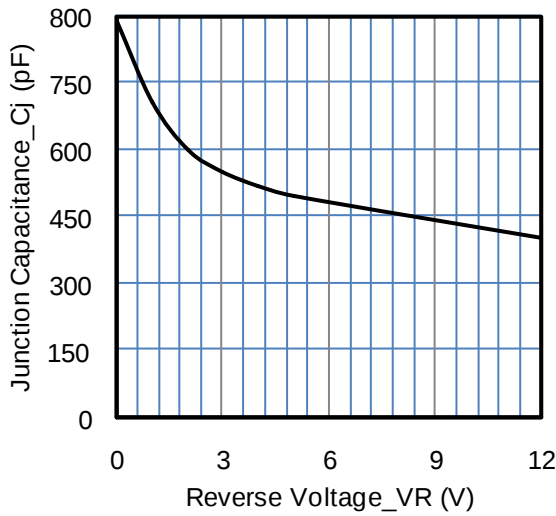


Fig1. Junction Capacitance vs. Reverse Voltage

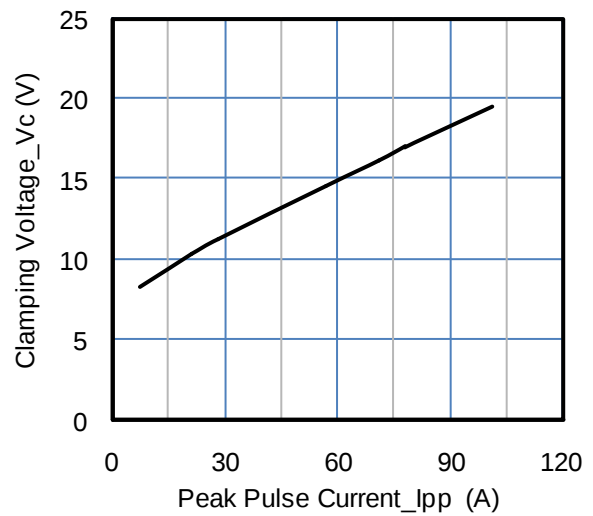


Fig2. Clamping Voltage vs. Peak Pulse Current

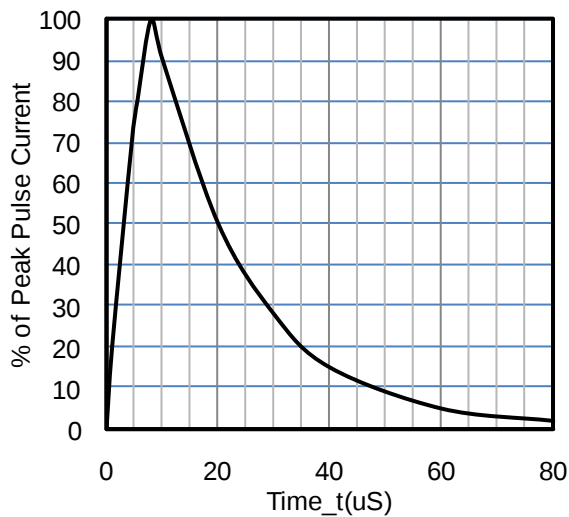


Fig3. 8 X 20uS Pulse Waveform

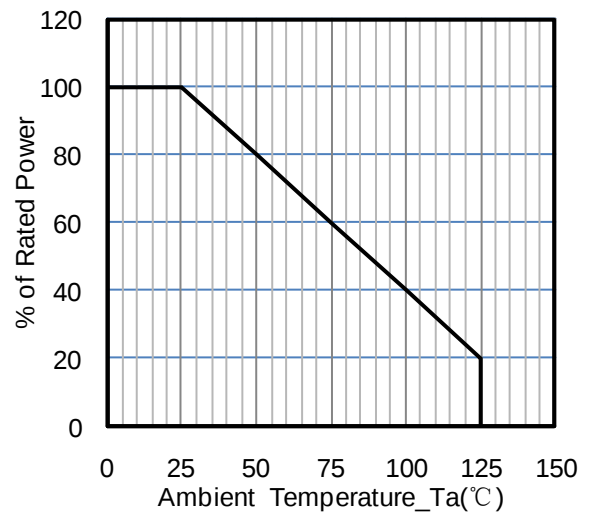


Fig4. Power Derating Curve

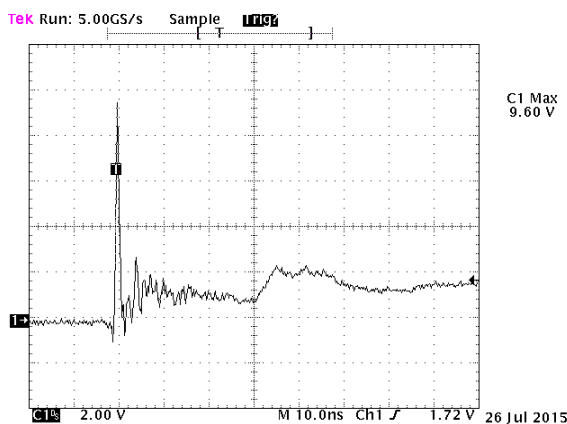


Fig 5. ESD Clamping Voltage
Positive 8 kV Contact per IEC61000-4-2

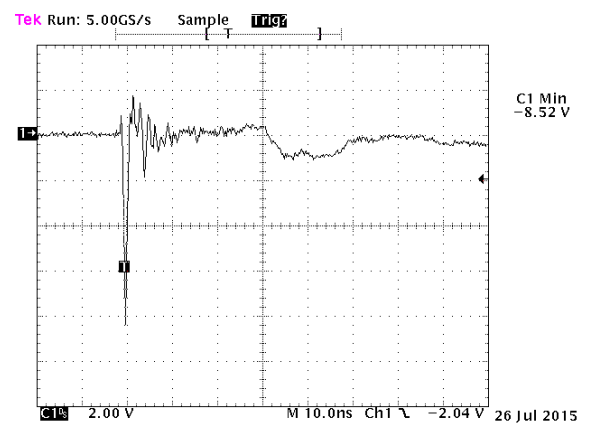
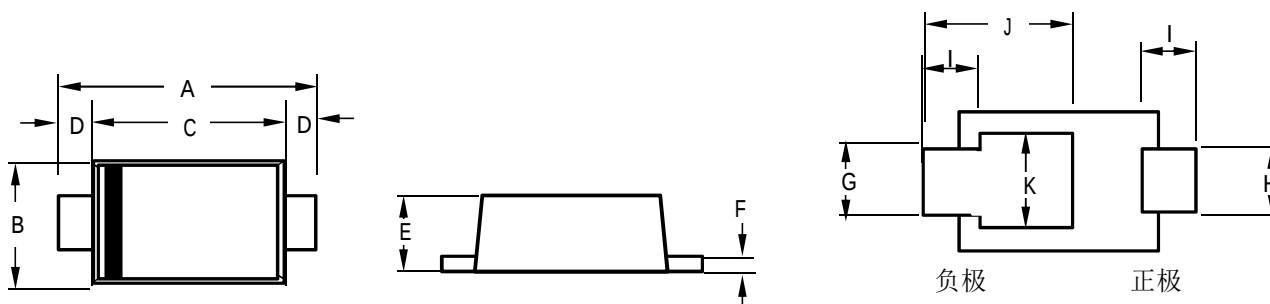


Fig 6. ESD Clamping Voltage
Negative 8 kV Contact per IEC61000-4-2

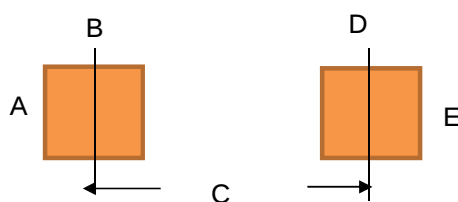
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SOD-323HE



DIM	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	2.30	2.70	0.091	0.106
B	1.20	1.35	0.047	0.053
C	1.75	1.95	0.069	0.077
D	0.30Typ		0.012Typ	
E	0.55	0.75	0.022	0.030
F	0.10	0.20	0.004	0.008
G	0.50	0.55	0.020	0.022
H	0.50	0.55	0.020	0.022
I	0.40	0.60	0.016	0.024
J	1.15	1.55	0.045	0.061
K	0.8Typ		0.032Typ	

Suggested solder pad layout



Dimensions in inches and (millimeters)

PACKAGE	A	B	C	D	E
SOD323-HE	0.032(0.8)	0.032(0.8)	0.085(2.15)	0.032(0.8)	0.032(0.8)