

## Features

- ◆ 150W (8x20us) PeakPulse Power
- ◆ Low Clamping Voltage
- ◆ SOD-323 Package
- ◆ RoHS Compliant
- ◆ MatteT in Lead finish (Pb-Free)
- ◆ Protect Onel/O or Power Line
- ◆ Meet IEC61000-4-2Level4:

Contact Discharge>30kV

Air Discharge>30 kV



PIN Diagram



Circuit Diagram

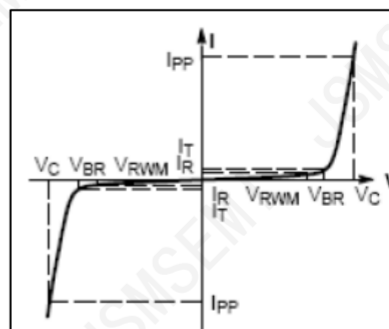
## Applications

- ◆ SmartPhones
- ◆ LaptopComputers
- ◆ PortableElectronics

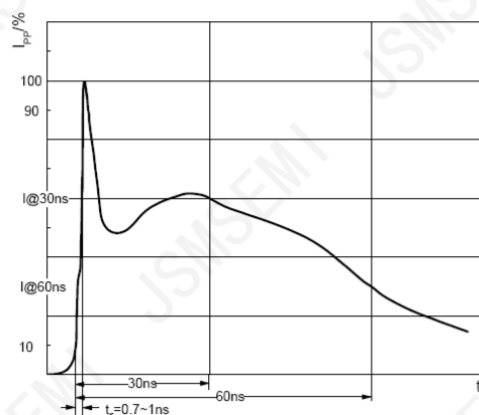
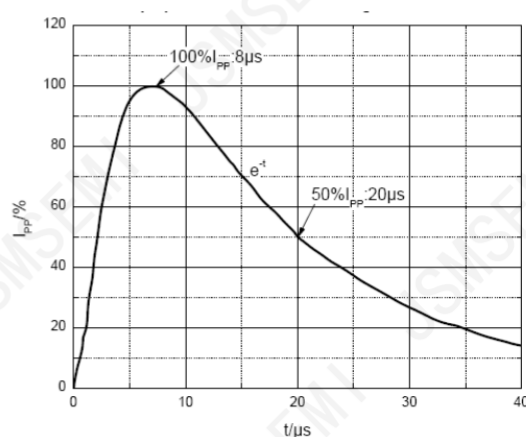
## Maximum Ratings(Ta=25°C)

Symbol	Parameter	Value	Unit
TJ	JunctionTemperature	-55to+150	°C
TSTG	StorageTemperature	-55to+150	°C
IppMax	MaximumPeakPulseCurrent	10	A
PPK	PeakPulsePower	150	W

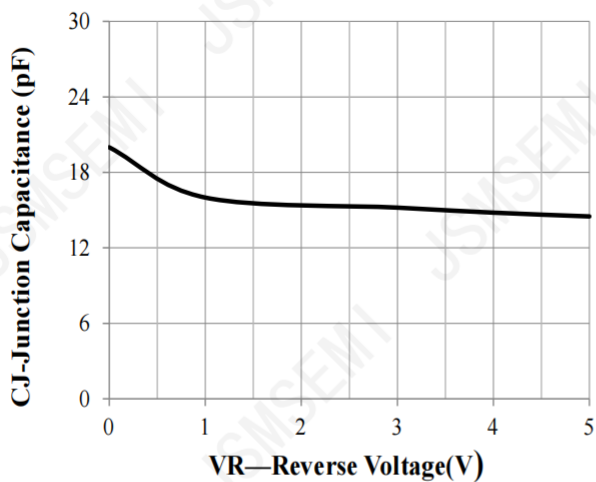
Symbol	Parameter
$V_C$	Clamping Voltage @ $I_{PP}$
$I_{PP}$	Peak Pulse Current
$V_{BR}$	Breakdown Voltage @ $I_T$
$I_T$	Test Current
$I_R$	Reverse Leakage Current @ $V_{RWM}$
$V_{RWM}$	Reverse Standoff Voltage


**V-I characteristics for a Bi-directional TVS**

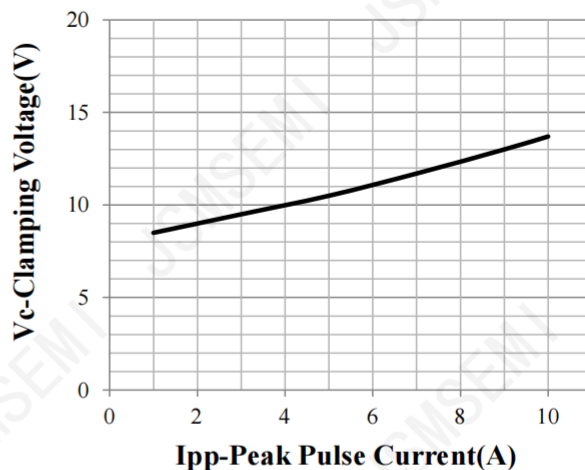
Electrical Characteristics( $T_a=25^{\circ}\text{C}$ )						
Symbol	Parameter	Conditions	Min	Typ	Max	Unit
$V_{RWM}$	Reverse Working Peak Voltage				5.0	V
$V_{BR}$	Reverse Breakdown Voltage	$I_T = 1\text{mA}$	6.2	7	8.5	V
$I_R$	Reverse Leakage Current	$V_{RWM} = 5.0\text{V}$			1	$\mu\text{A}$
$V_C$	Clamping Voltage	$I_{PP} = 1\text{A} (8/20\mu\text{s})$			9	V
$V_C$	Clamping Voltage	$I_{PP} = 10\text{A} (8/20\mu\text{s})$			15	V
$I_{PP}$	Peak Pulse Current	$\mu\text{s}) t_p = 8/20\mu\text{s}$			10	A
$C_J$	Capacitance	$V_R = 0\text{V}, f = 1\text{MHz}$		25		pF


**ESD pulse waveform according to IEC61000-4-2**

**8/20us pulse waveform according to IEC 61000-4-5**

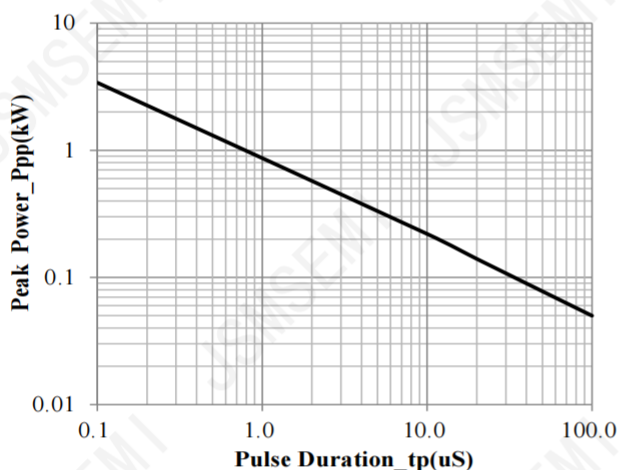
Typical Performance Characteristics (TA =25°C unless otherwise Specified)



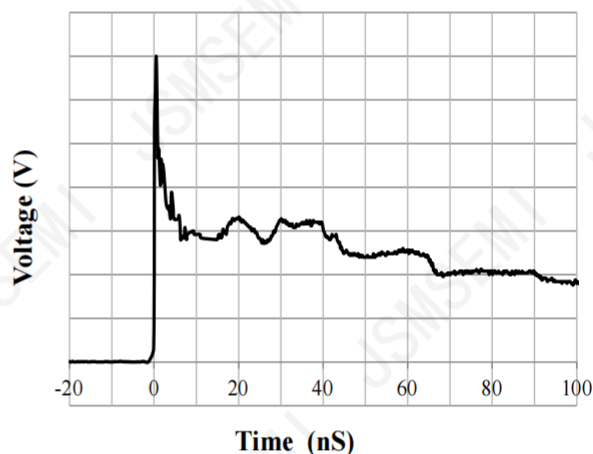
Junction Capacitance vs. Reverse Voltage



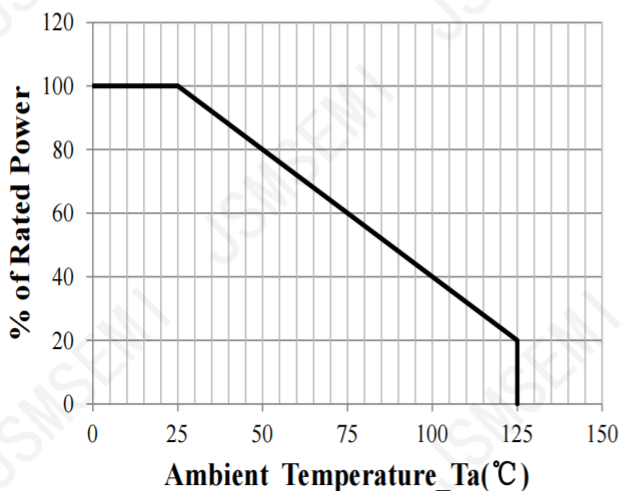
Clamping Voltage vs. Peak Pulse Current



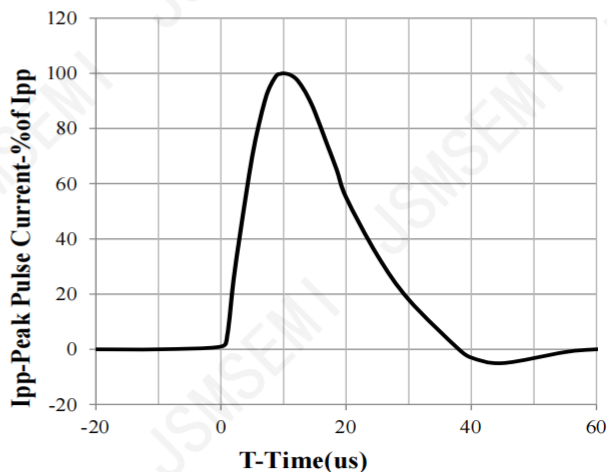
Peak Pulse Power vs. Pulse Time



IEC61000-4-2 Pulse Waveform

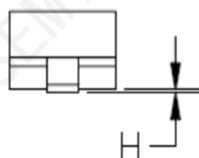
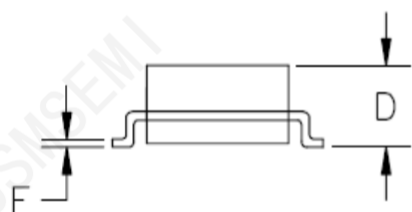
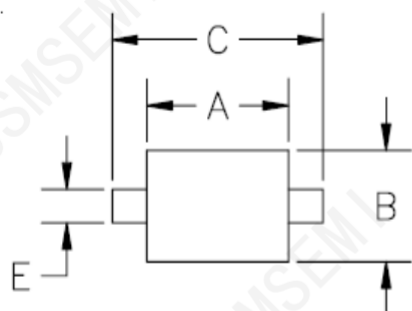


Power Derating Curve



8 X 20us Pulse Waveform

## SOD-323 Dimension



DIM <sup>N</sup>	INCHES		MM [1]		NOTE
	MIN	MAX	MIN	MAX	
A	.060	.071	1.5	1.8	—
B	.045	.054	1.2	1.4	—
C	.090	.107	2.3	2.7	—
D	—	.043	—	1.1	—
E	.012	.016	0.3	0.4	—
F	.004	.010	.10	.25	—
H	—	.004	—	.10	—

[1] CONTROLLING DIMENSION: MILLIMETERS

## Revision History

Rev.	Change	Date
V1.0	Initial version	2/23/2024

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