

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:



PIN Diagram

Contact Discharge>30kV
Air Discharge>30 kV



Applications

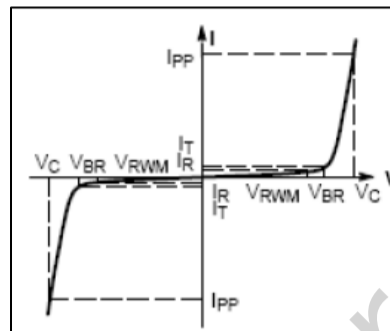
- ◆ SmartPhones
- ◆ LaptopComputers
- ◆ PortableElectronics

Circuit Diagram

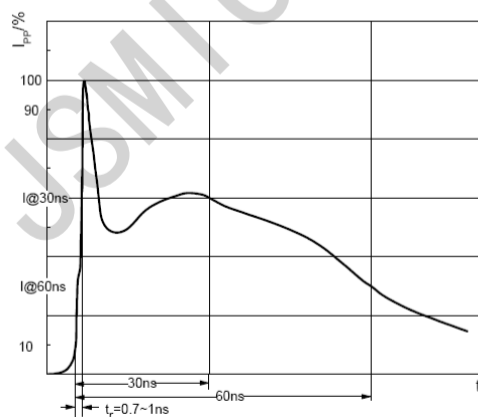
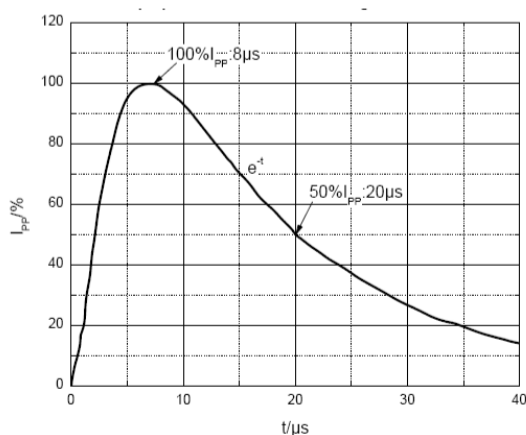
Maximum Ratings(Ta=25°C)

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

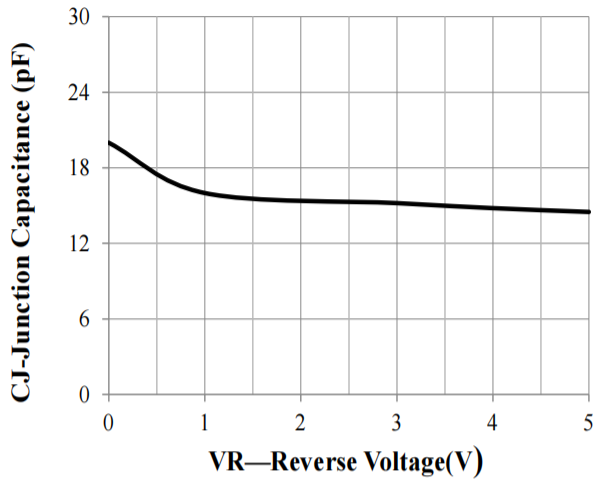
Symbol	Parameter
V_C	Clamping Voltage @ I_{PP}
I_{PP}	Peak Pulse Current
V_{BR}	Breakdown Voltage @ I_T
I_T	Test Current
I_R	Reverse Leakage Current @ V_{RWM}
V_{RWM}	Reverse Standoff Voltage


V-I characteristics for a Bi-directional TVS
Electrical Characteristics ($T_a = 25^\circ\text{C}$)

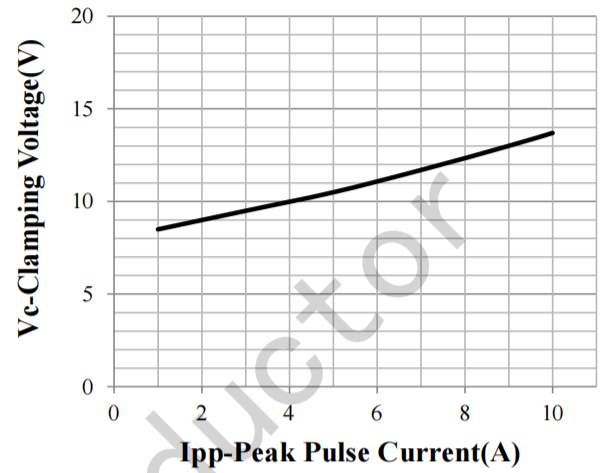
PESD3D5C						
Symbol	Parameter	Conditions	Min	Typ	Max	Unit
V_{RWM}	Reverse Working Peak Voltage				5.0	V
V_{BR}	Reverse Breakdown Voltage	$I_T = 1\text{mA}$	6.2	7	8.5	V
I_R	Reverse Leakage Current	$V_{RWM} = 5.0\text{V}$			1	μA
V_C	Clamping Voltage	$I_{PP} = 1\text{A (8/20}\mu\text{s)}$			9	V
V_C	Clamping Voltage	$I_{PP} = 1.0\text{A (8/20}\mu\text{s)}$			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

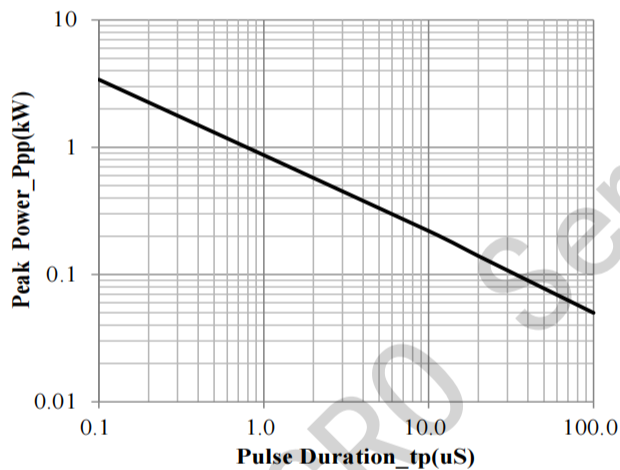
Typical Performance Characteristics (TA =25°C unless otherwise Specified)



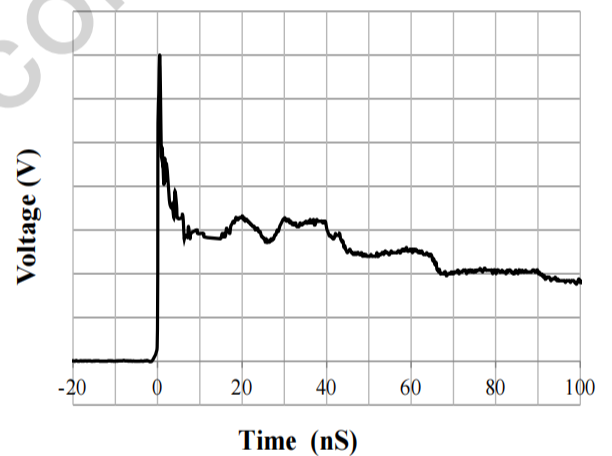
Junction Capacitance vs. Reverse Voltage



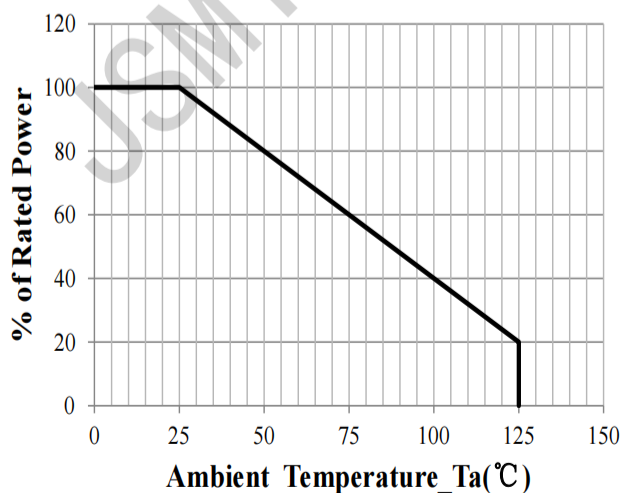
Clamping Voltage vs. Peak Pulse Current



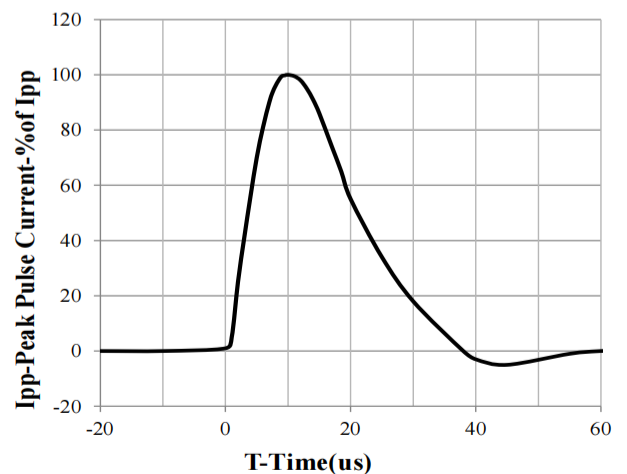
Peak Pulse Power vs. Pulse Time



IEC61000-4-2 Pulse Waveform

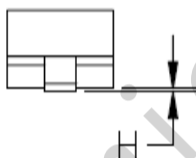
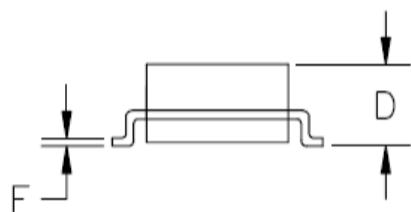
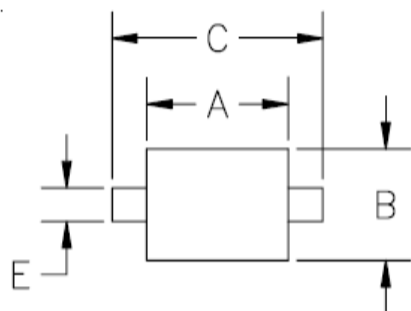


Power Derating Curve



8 X 20us Pulse Waveform

SOD-323 Dimension



DIM ^N	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