

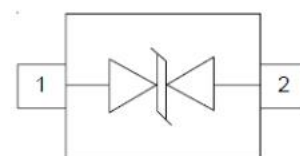
Features

- ◇ 350W (8x20us) Peak Pulse Power
- ◇ Low Clamping Voltage
- ◇ SOD-323 Package
- ◇ RoHS Compliant
- ◇ Matte Tin Lead finish (Pb-Free)
- ◇ Protect One I/O or Power Line
- ◇ Meet IEC61000-4-2 Level 4:
 - Contact Discharge > 25kV
 - Air Discharge > 25kV

Circuit Diagram



PIN Diagram



Applications

- ◇ Smart Phones
- ◇ Laptop Computers
- ◇ Portable Electronics

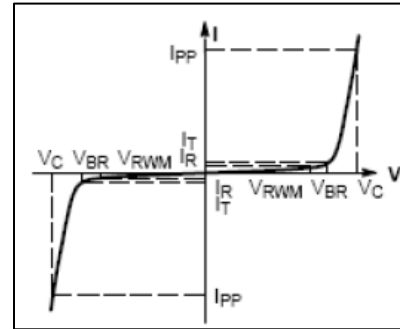
Ordering information

Device	Package	MARKING	Qty / Reel
PSD03C	SOD-323	G	3000

Maximum Ratings (Ta = 25°C)

Symbol	Parameter	Value	Unit
TJ	Junction Temperature	-55 to +150	°C
TSTG	Storage Temperature	-55 to +150	°C
Ipp Max	Maximum Peak Pulse Current	20	A
PPK	Peak Pulse Power	350	W

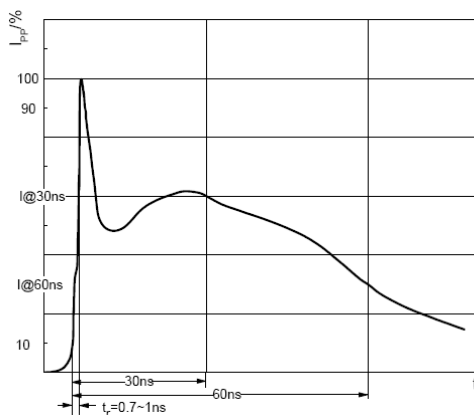
Symbol	Parameter
V_C	Clamping Voltage @ I_{PP}
I_{PP}	Peak Pulse Current
V_{BR}	Breakdown Voltage @ I_T
I_T	Test Current
I_R	Reverse Leakage Current @ V_{RWM}
V_{RWM}	Reverse Standoff Voltage



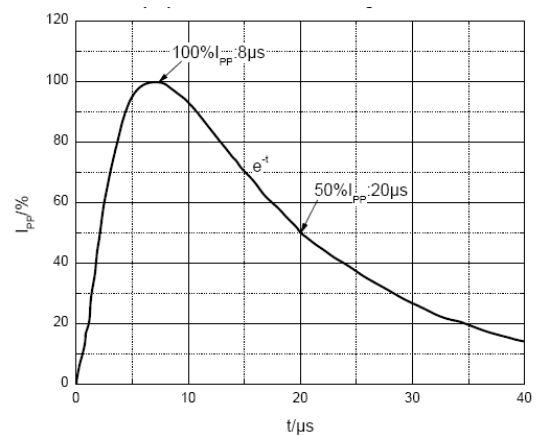
V-I characteristics for a Bi-directional TVS

Electrical Characteristics ($T_a = 25^\circ\text{C}$)

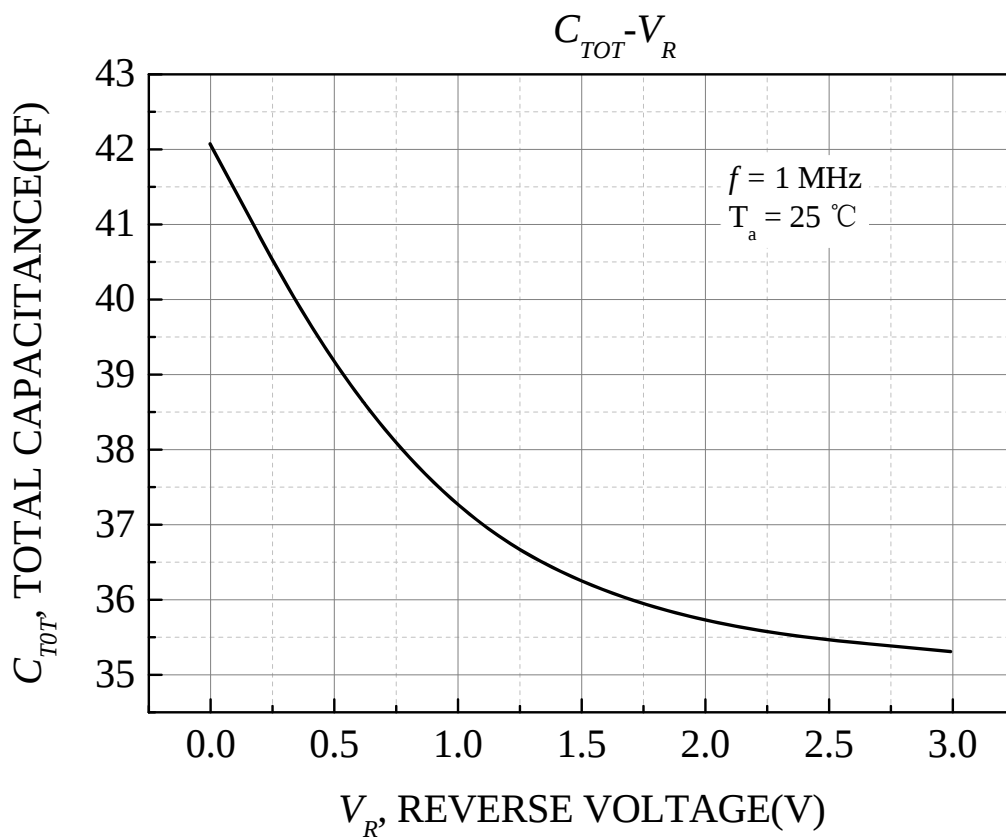
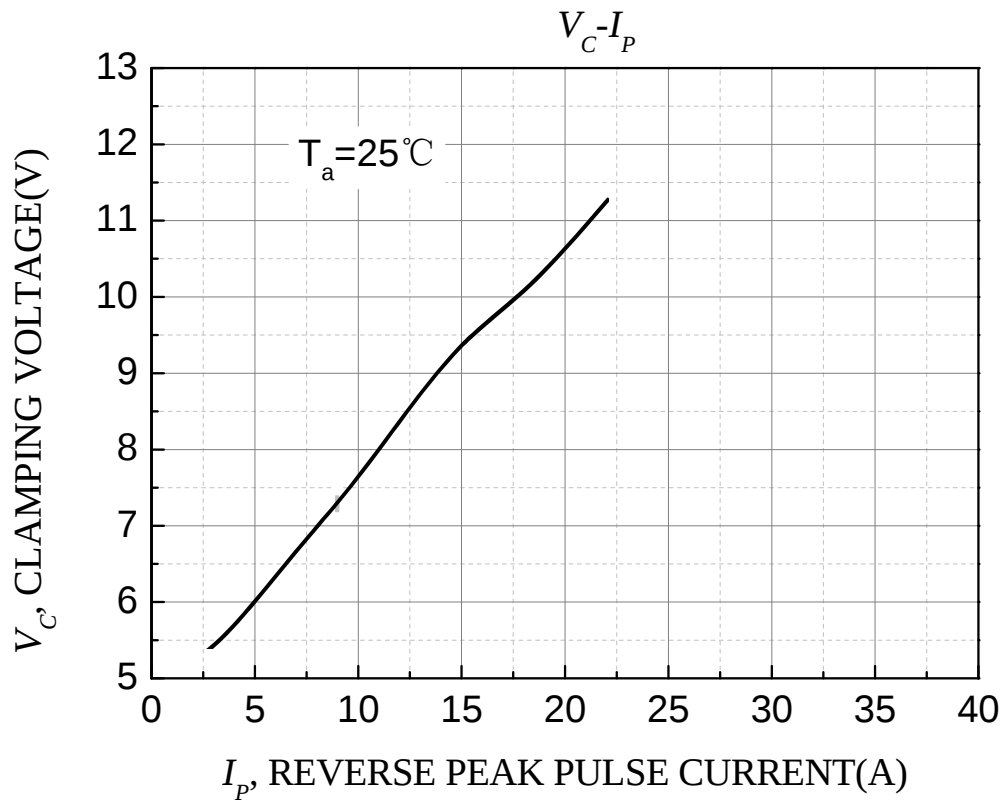
PSD03C						
Symbol	Parameter	Conditions	Min	Typ	Max	Unit
V_{RWM}	Reverse Working Peak Voltage				3.3	V
V_{BR}	Reverse Breakdown Voltage	$I_T = 1\text{mA}$	4		7.5	V
I_R	Reverse Leakage Current	$V_{RWM} = 3.3\text{V}$			0.2	μA
V_C	Clamping Voltage	$I_{PP} = 8\text{A} (8/20\mu\text{s})$		10	15	V
V_C	Clamping Voltage	$I_{PP} = 20\text{A} (8/20\mu\text{s})$		12	18	V
I_{PP}	Peak Pulse Current	$t_p = 8/20\mu\text{s}$			20	A
C_J	Capacitance	$V_R = 0\text{V}, f = 1\text{MHz}$			200	pF



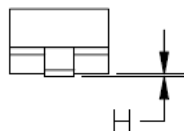
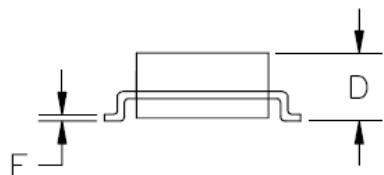
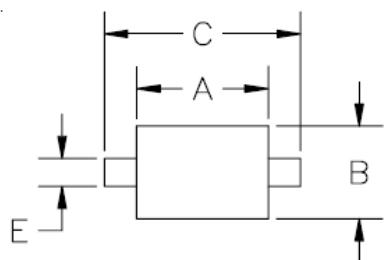
ESD pulse waveform according to IEC61000-4-2


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

Typical Performance Curves



SOD-323 Dimension



DIM ^N	INCHES		MM		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