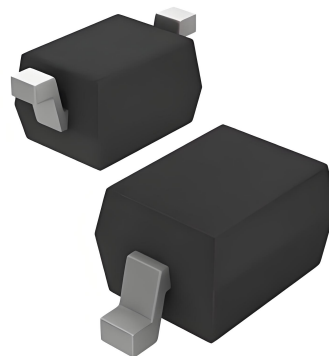


Features

- 450W (tp=8/20μs) Peak Pulse Power
- Bi-directional configurations
- Low clamping voltage
- Low leakage current
- Moisture sensitivity level: Level 3
- Solid-state silicon avalanche technology
- Meet IEC61000-4-2
 - Contact discharge ±30kV
 - Air discharge ±30kV



Applications

- Computers and peripherals
- Digital Cameras
- Audio and video equipment
- Cellular handsets and accessories
- Portable electronics
- PAD
- Other electronics equipments communi- cation systems

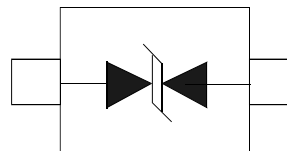
Meachanical Data

- SOD323 package
- Molding compound flammability rating: UL94V-0
- Packaging: Tape and Reel(7 inch)

Agency Approvals

Icon	Description
RoHS	Compliance with (EU)2015/863
HF	Compliance with IEC61249-2-21:2003
	Mean lead free

Schematic & PIN Configuration



Absolute Maximum Ratings

Parameter	Symbol	Value	Unit
Peak Pulse Power($t_p=8/20\mu s$)	P_{PK}	450	W
Peak Pulse Current($t_p=8/20\mu s$)	I_{PP}	30	A
Lead Soldering Temperature	T_L	260(10seconds)	$^{\circ}C$
Junction Temperature	T_J	-55 to +150	$^{\circ}C$
Storage Temperature	T_{STG}	-55 to +150	$^{\circ}C$

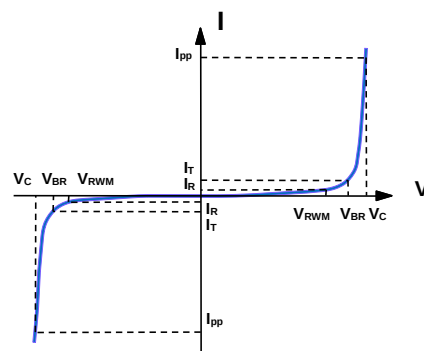
Electrical Characteristics (TA=25 $^{\circ}C$ unless otherwise specified)

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Reverse Stand-Off Voltage	V_{RWM}				5	V
Breakdown Voltage	V_{BR}	$I_T = 1mA$	5.5	6.5	8.0	V
Reverse Leakage Current	I_R	$V_{RWM} = 5V$			0.2	μA
Clamping Voltage	V_C	$I_{PP} = 1A, t_p=8/20\mu s$			9	V
Clamping Voltage	V_C	$I_{PP} = 30A, t_p=8/20\mu s$		10	15	V
Junction Capacitance	C_J	$V_R = 0V, f = 1MHz$		70	100	pF

I-V Curve Characteristics

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

Note: 8/20 μs pulse waveform.



Characteristics Curves(TA=25°C unless otherwise Specified)

Fig 1. 8/20μs Pulse Waveform

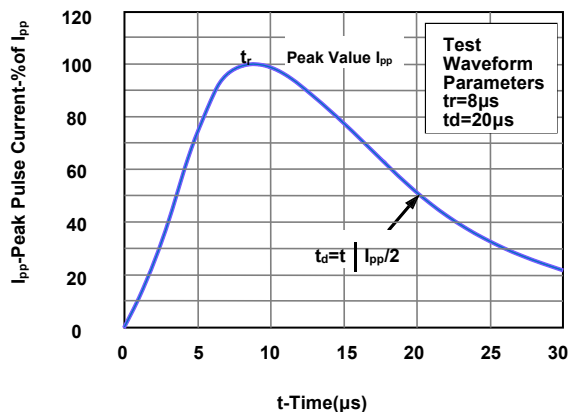


Fig 2. ESD Pulse Waveform (according to IEC61000-4-2)

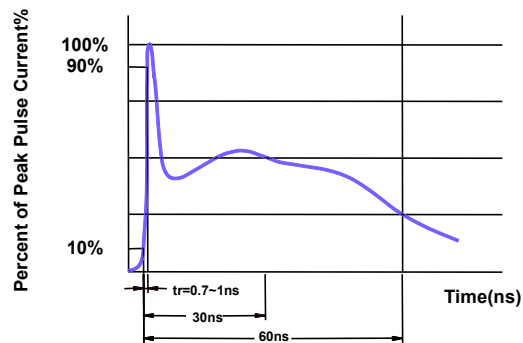


Fig 3. Power Derating Curve

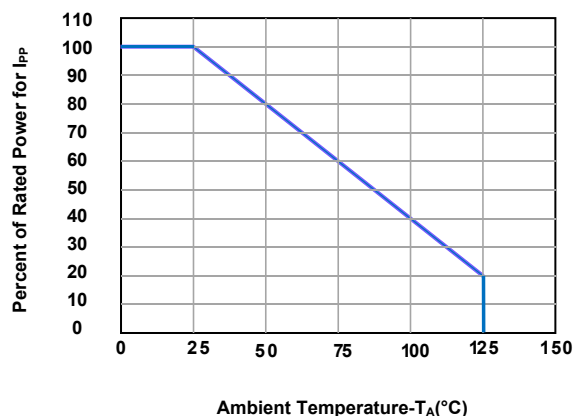


Figure 4. Clamping Voltage vs. Ipp

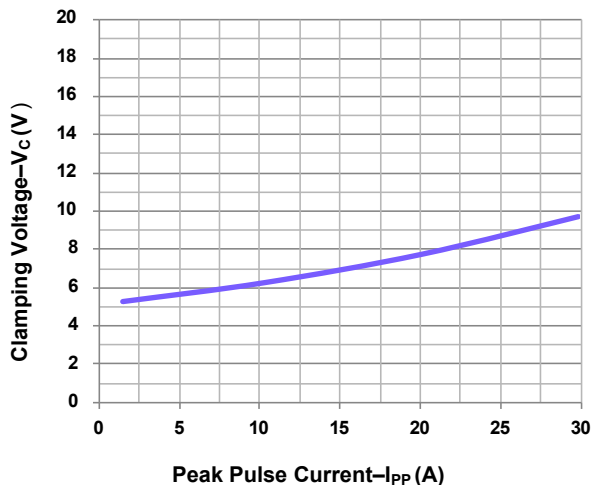


Fig 5. Peak Pulse Power vs. Pulse Time

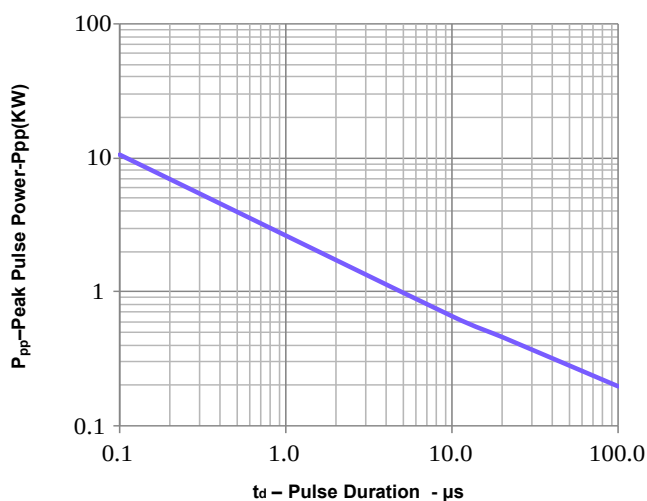
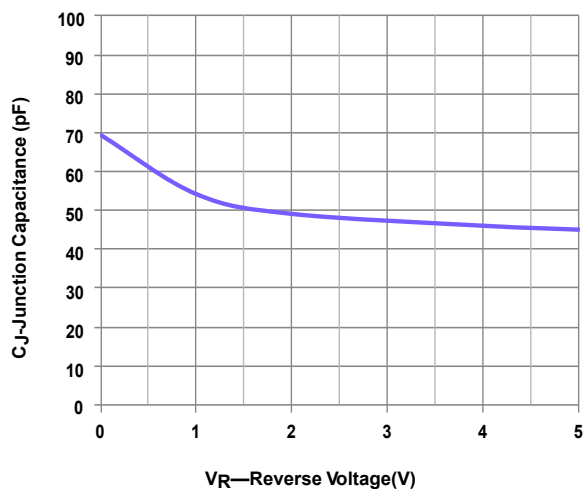
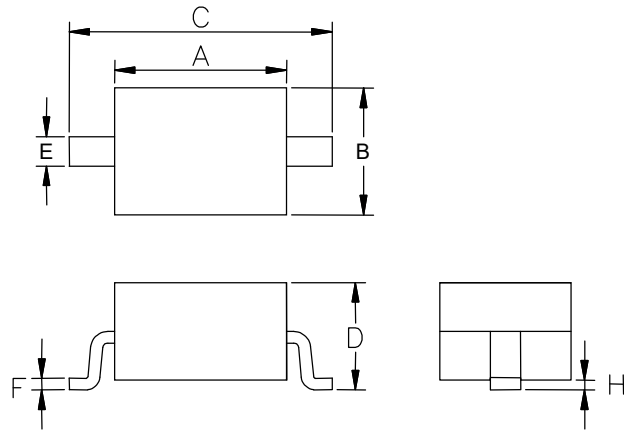


Figure 6. Junction Capacitance vs. Reverse Voltage

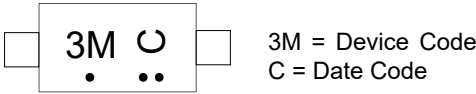


SOD323 Package Outline



DIM	Millimeters		Inches	
	Min	Max	Min	Max
A	1.50	1.80	0.060	0.071
B	1.20	1.40	0.045	0.054
C	2.30	2.70	0.090	0.107
D	0.00	1.10	0.00	0.043
E	0.30	0.40	0.012	0.016
F	0.10	0.25	0.004	0.010
H		0.10	0.00	0.004

Marking Information



3M = Device Code
C = Date Code

Packaging Information

	Reel	Inner Box	Carton
Size	φ178mm(7 inch)	215×205×205mm	435×435×230mm
Quantity	MPQ/MOQ: 1 reel=3000pcs	1 Inner box=10 reels=30,000pcs	1Carton=4 Inner boxes=120,000pcs
Photos			

Notice: 1、 Each reel is placed in an aluminum foil bag and vacuum-packed separately.
2、 Above packaging photos make from 3D software for reference only, please refer to actual product as the standard.