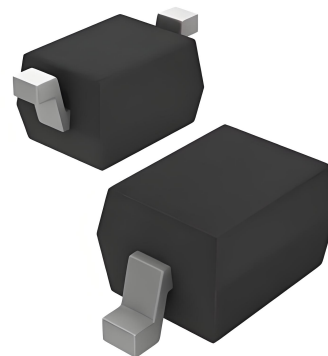


Features

- 416W (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

- Microprocessor based equipment
- Personal Digital Assistants (PDA's)
- Notebooks, Desktops, and Servers
- Portable Instrumentation
- Pagers Peripherals

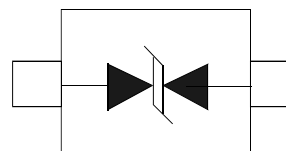
Meachanical Data

- 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}	416	W
Peak Pulse Current($t_p=8/20\mu s$)	I_{PP}	32	A
Lead Soldering Temperature	T_L	260(10seconds)	$^{\circ}C$
Junction Temperature	T_J	-40 to +125	$^{\circ}C$
Storage Temperature	T_{STG}	-55 to +150	$^{\circ}C$

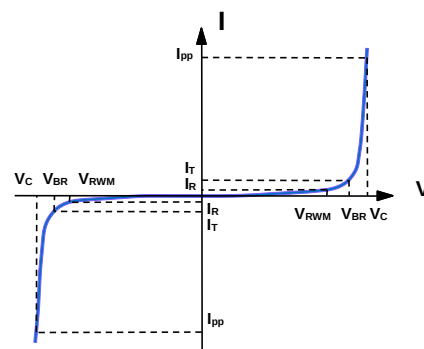
Electrical Characteristics (TA=25 $^{\circ}C$ unless otherwise specified)

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Reverse Stand-Off Voltage	V_{RWM}				3.3	V
Breakdown Voltage	V_{BR}	$I_T = 1mA$	4	4.8	5.5	V
Reverse Leakage Current	I_R	$V_{RWM} = 3.3V$		<10	100	nA
Clamping Voltage	V_C	$I_{PP} = 1A, t_p=8/20\mu s$		6	7	V
Clamping Voltage	V_C	$I_{PP} = 20A, t_p=8/20\mu s$		7.6	9	V
Clamping Voltage	V_C	$I_{PP} = 32A, t_p=8/20\mu s$		9.5	13	V
Junction Capacitance	C_J	$V_R = 0V, f = 1MHz$		65	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

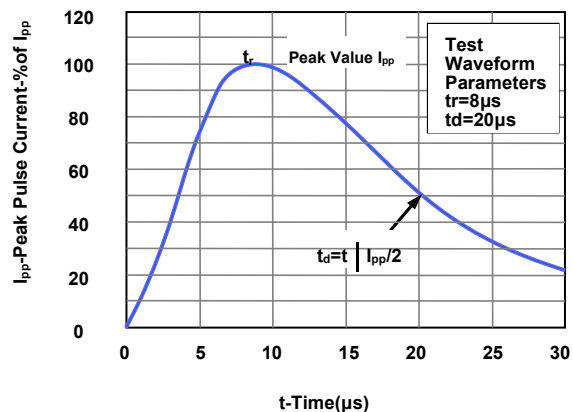


Fig 2. ESD Pulse Waveform (according to IEC61000-4-2)

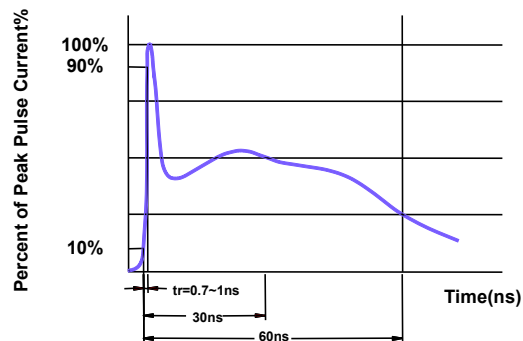
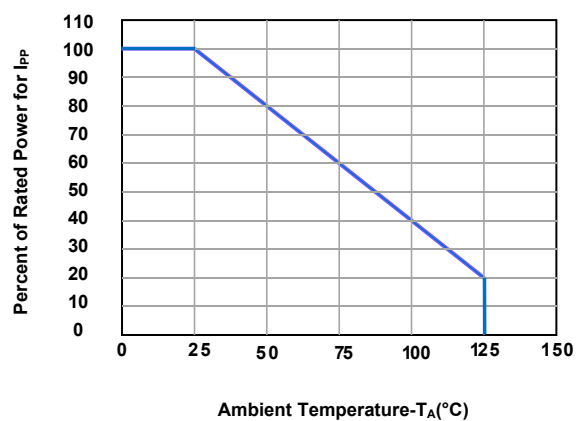
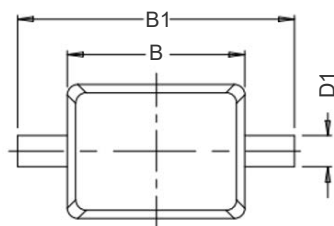


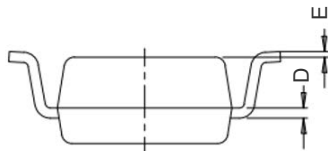
Fig 3. Power Derating Curve



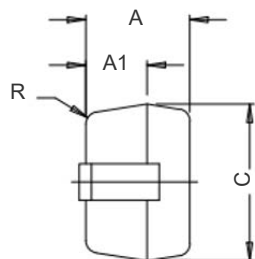
SOD323 Package Outline



TOP VIEW



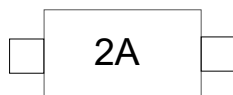
SIDE VIEW



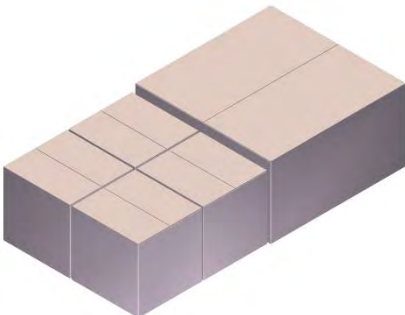
SIDE VIEW

DIM	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	0.7	0.9	0.0276	0.0354
A1	0.45	0.55	0.0177	0.0217
B	1.65	1.75	0.0650	0.0689
B1	2.55	2.75	0.1004	0.1083
C	1.25	1.35	0.0492	0.0531
D	0.10	0.12	0.0039	0.0047
D1	0.28	0.32	0.0110	0.0126
E	-	0.10	-	0.039
R	0.02	0.05	0.0008	0.020

Marking Information



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	1 Carton=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.