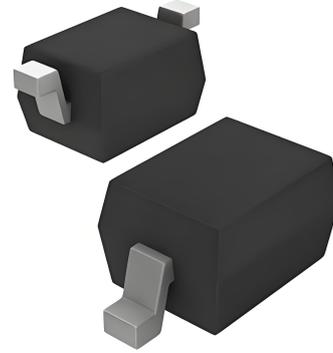


## Features

- 450W (tp=8/20μs) Peak Pulse Power
- Bi-directional configurations
- Low clamping voltage
- Low leakage current
- Low Capacitance ESD Protection
- Moisture sensitivity level: Level 1
- Solid-state silicon avalanche technology
- Meet IEC61000-4-2  
Contact discharge ±30kV  
Air discharge ±30kV



## Applications

- Ethernet-10/100/1000 Base T
- Handheld-Wireless Systems
- USB Interface
- Personal Digital Assistant(PDA's)
- Cellular Phones

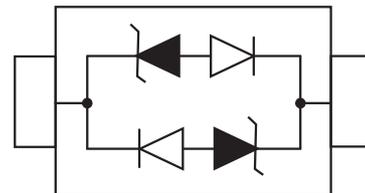
## Mechanical Data

- 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( $t_p=8/20\mu s$ )	$I_{PP}$	15	A
Lead Soldering Temperature	$T_L$	260(10seconds)	°C
Operating Temperature	$T_J$	-55 to +150	°C
Storage Temperature	$T_{STG}$	-55 to +150	°C

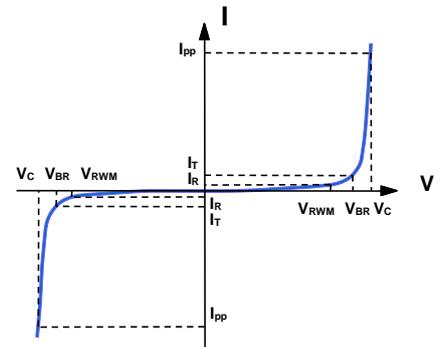
**Electrical Characteristics (TA=25°C unless otherwise specified)**

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Reverse Stand-Off Voltage	$V_{RWM}$				15	V
Breakdown Voltage	$V_{BR}$	$I_T = 1mA$	16.7			V
Reverse Leakage Current	$I_R$	$V_{RWM} = 15V$			1	$\mu A$
Clamping Voltage	$V_C$	$I_{PP} = 1A, t_p=8/20\mu s$			19	V
Clamping Voltage	$V_C$	$I_{PP} = 15A, t_p=8/20\mu s$			30	V
Junction Capacitance	$C_J$	$V_R = 0V, f = 1MHz$		1.0		pF

**I-V Curve Characteristics**

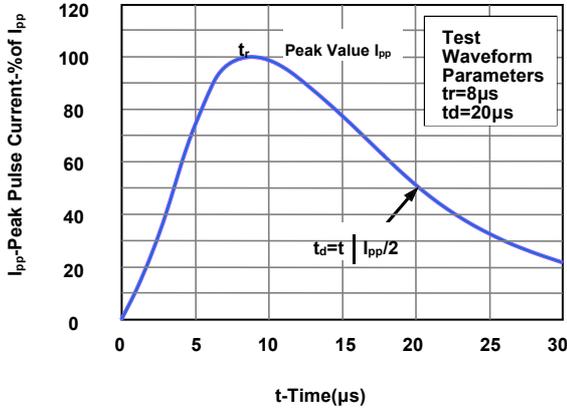
Symbol	Parameter
$I_{PP}$	Maximum Reverse Peak Pulse Current
$V_C$	Clamping Voltage @ $I_{PP}$
$V_{RWM}$	Reverse Stand-Off Voltage
$I_R$	Maximum Reverse Leakage Current @ $V_{RWM}$
$V_{BR}$	Breakdown Voltage @ $I_T$
$I_T$	Test Current

Note: 8/20 $\mu s$  pulse waveform.

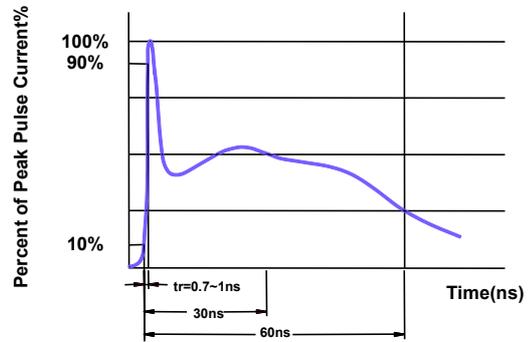


**Characteristics Curves(TA=25°C unless otherwise Specified)**

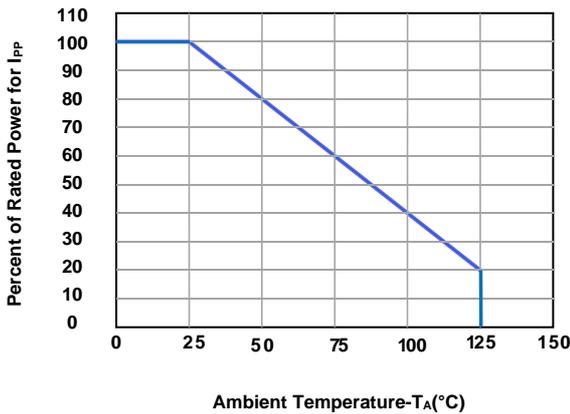
**Fig 1. 8/20µs Pulse Waveform**



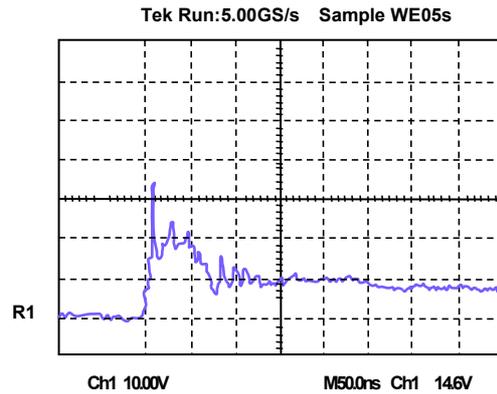
**Fig 2. ESD Pulse Waveform (according to IEC61000-4-2)**



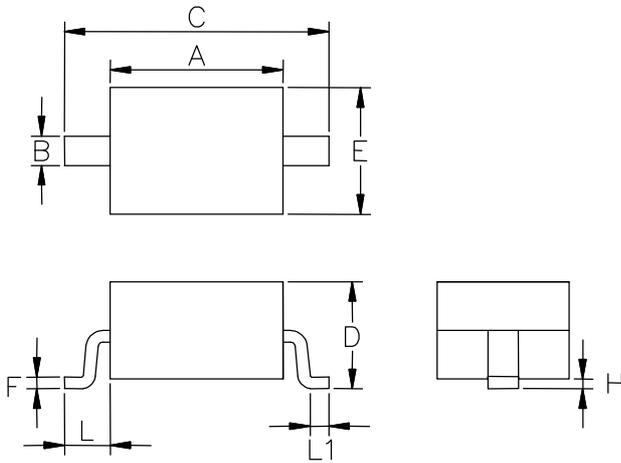
**Fig 3. Power Derating Curve**



**Figure 4.ESD Clamping(8KV Contact per IEC61000-4-2)**



SOD323 Package Outline



DIM	Millimeters		Inches	
	Min	Max	Min	Max
A	1.60	1.80	0.063	0.071
B	0.25	0.35	0.010	0.014
C	2.50	2.70	0.098	0.106
D	0.00	1.00	0.00	0.039
E	1.20	1.40	0.047	0.055
F	0.08	0.15	0.003	0.006
L	0.475REF		0.019REF	
L1	0.25	0.40	0.010	0.016
H	0.00	0.10	0.00	0.004

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	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.