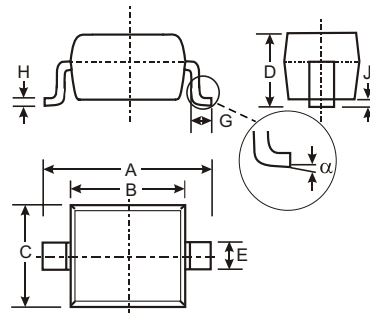
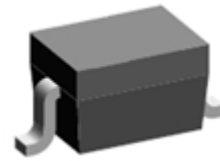


### Features

- Small SOD-323 Package
- Bi-directional Configurations
- Peak Power Dissipation 100W @ 8 x 20 us Pulse
- Low Leakage
- Ultralow Capacitance 0.5pF
- Fast Response Time < 5 ns
- Protects One Power or I/O Port
- ESD Protection to IEC 61000-4-2 Level 4, 15KV(Air), 8KV(Contact)
- EFT Protection to IEC 61000-4-4 Level 4, 30A
- 16KV Human Body Model ESD Requirements
- RoHS Compliant in Lead-Free Versions

### Applications

- Cell Phone Handsets and Accessories
- Microprocessor Based Equipment
- Personal Digital Assistant (PDA)
- Notebooks, Desktops, and Servers
- Portable Instrumentation
- USB Interface



SOD-323		
Dim	Min	Max
A	2.30	2.70
B	1.60	1.80
C	1.20	1.40
D	1.05 Typical	
E	0.25	0.35
G	0.20	0.40
H	0.10	0.15
J	0.05 Typical	
$\alpha$	0°	8°
All Dimensions in mm		



### Absolute Maximum Ratings $T_A = 25^\circ\text{C}$ unless otherwise specified

Parameter	Symbol	Value	Units
Peak Pulse Power Dissipation (Note 1.) @ $T_L = 25^\circ\text{C}$	$P_{PK}$	200	W
Peak Pulse Current (Note 1.) @ $T_L = 25^\circ\text{C}$	$I_{PP}$	3	A
IEC 61000-4-2 (ESD)	Air	$\pm 15$	KV
	CONTACT	$\pm 8.0$	KV
IEC 61000-4-4 (EFT)		30	A
ESD Voltage	Per Human Body Model	$V_{PP}$ 16	KV
Storage Temperature Range	$T_{STG}$	-55 to 150	$^\circ\text{C}$
Operating Junction Temperature Range	$T_J$	-55 to 150	$^\circ\text{C}$

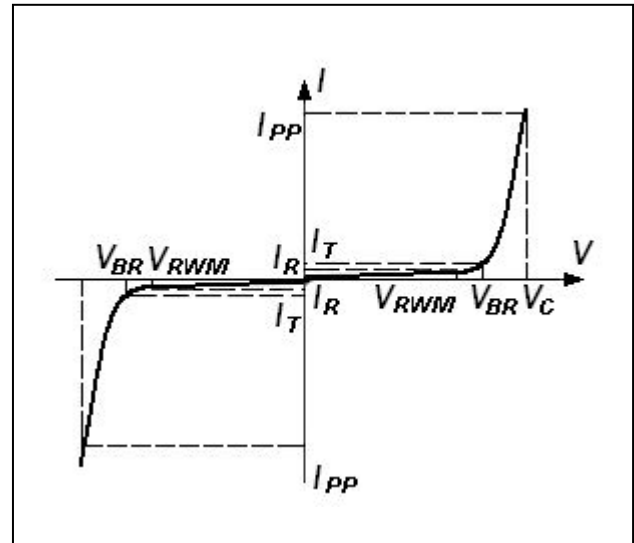
1. 8 X 20 us, non-repetitive



### Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

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



### Electrical Characteristics Ratings at 25°C ambient temperature unless otherwise specified.

Parameter	Symbol	Min	Typ	Max	Unit
Reverse Working Voltage	$V_{RWM}$			5	V
Breakdown Voltage @ $I_T=1mA$	$V_{BR}$	6			V
Reverse Leakage Current @ $V_{RWM}=5V$	$I_R$			0.5	uA
Clamping Voltage @ $I_{pp}=1A$ (8/20)	$V_C$			15	V
Clamping Voltage @ $I_{pp}=3A$ (8/20)	$V_C$			26	V
Junction Capacitance @ $V_R=0V$ $f=1MHz$	$C_j$		0.35	0.5	pF

\*Surge current waveform per Figure 1.

2.  $V_{BR}$  is measured with a pulse test current  $I_T$  at an ambient temperature of 25°C

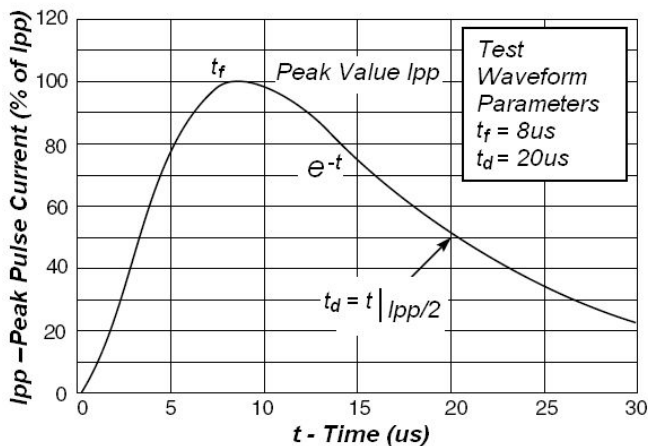


Fig1. Pulse Waveform

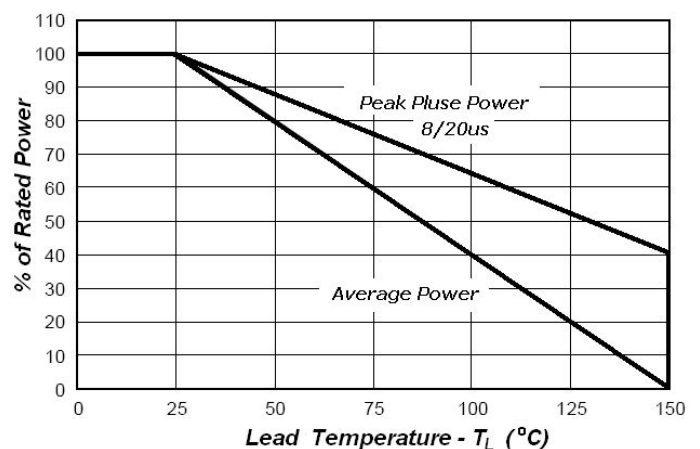
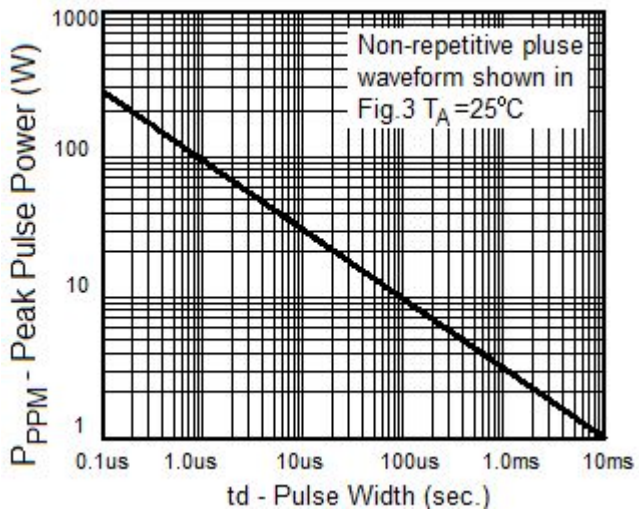


Fig2. Power Derating



**Fig3. Peak Pulse Power vs Pulse Time**