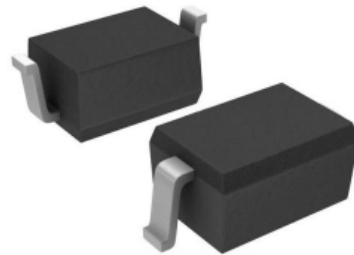


## Features

- 350W peak pulse power (8/20us)
- Protects one data or power line
- Ultra low leakage: nA level
- Stand-off voltage: 15 V
- Ultra low clamping voltage
- RoHS compliant



SOD-323

## IEC Compatibility (EN61000-4)

- IEC 61000-4-2 (ESD)  $\pm 30\text{kV}$  contact  $\pm 30\text{kV}$  air
- IEC 61000-4-4 (EFT) 40A (5/50ns)
- IEC 61000-4-5 (Lightning) 10A (8/20 $\mu\text{s}$ )

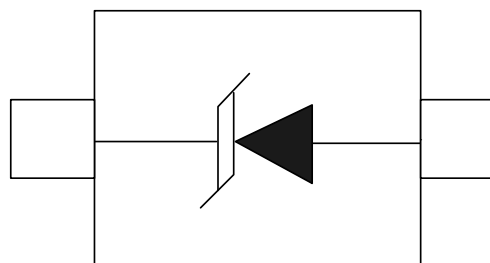
## Applications

- Laptop Computers
- Cellular Phones
- Digital Cameras
- Personal Digital Assistants(PDAs)

## Mechanical Characteristics

- Lead Finish: NiPdAu
- Case Material: "Green" Molding Compound.
- UL Flammability Classification Rating 94V-0
- Moisture Sensitivity: Level 3 per J-STD-020
- Terminal Connections: See Diagram Below

## Schematic & PIN Configuration



SOD-323

## Absolute Maximum Ratings

Parameter	Symbol	Value	Unit
Peak Pulse Power ( $t_p = 8/20\mu s$ waveform)	$P_{PP}$	350	W
Peak Pulse Current (8/20 $\mu s$ )	$I_{PP}$	10	A
ESD per IEC 61000-4-2 (Air)	$V_{ESD}$	$\pm 30$	kV
ESD per IEC 61000-4-2 (Contact)		$\pm 30$	
Operating Temperature Range	$T_J$	-55 to +125	$^{\circ}C$
Storage Temperature Range	$T_{STG}$	-55 to +150	$^{\circ}C$

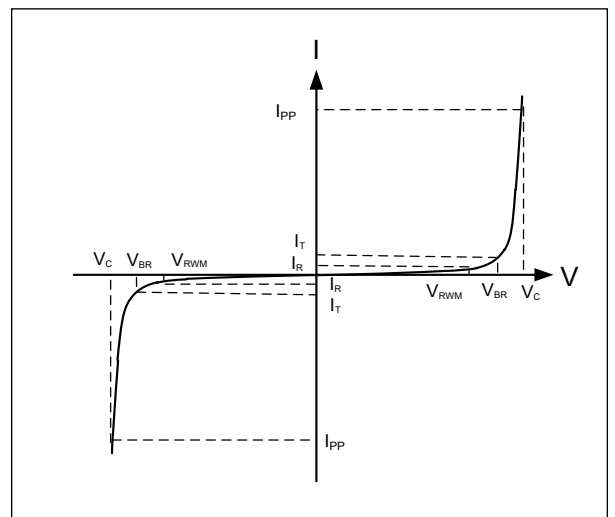
## Electrical Characteristics

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Reverse Working 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	$V_C$	$I_{PP} = 1A$ (8 x 20 $\mu s$ pulse)		17.6		V
Clamping Voltage	$V_C$	$I_{PP} = 10A$ (8 x 20 $\mu s$ pulse)			38	V
Junction Capacitance	$C_J$	$V_R = 0V, f = 1MHz$		120		pF

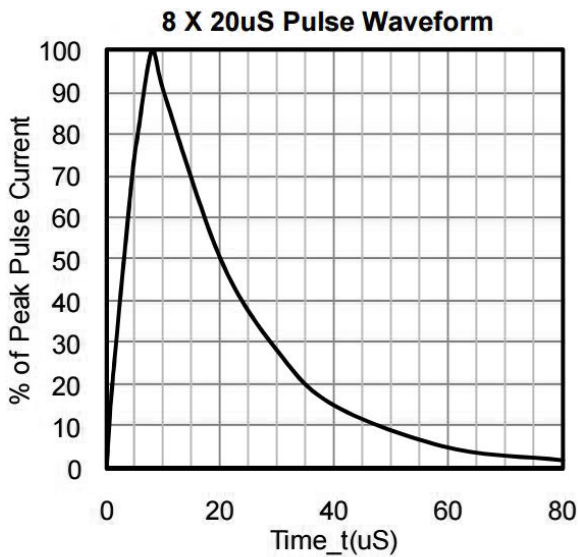
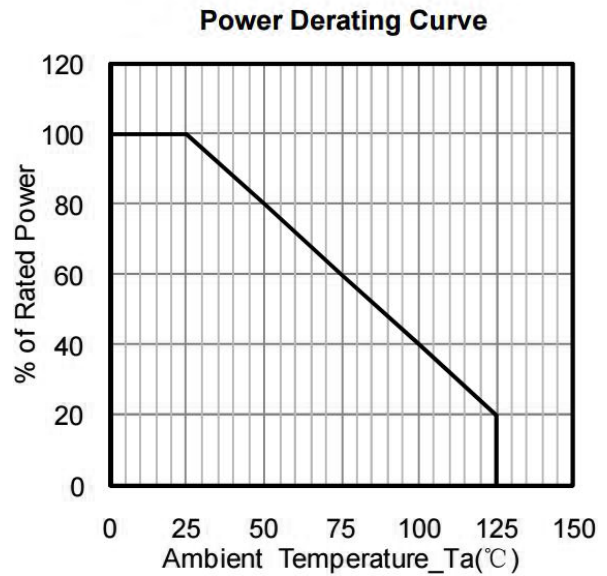
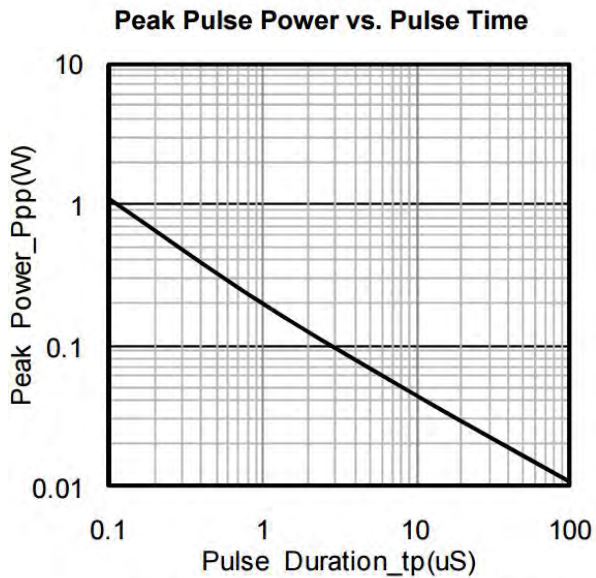
## Electrical Parameters (TA = 25 $^{\circ}C$ unless otherwise noted)

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 @ $V_{RWM}$
$V_{BR}$	Breakdown Voltage @ $I_T$
$I_T$	Test Current

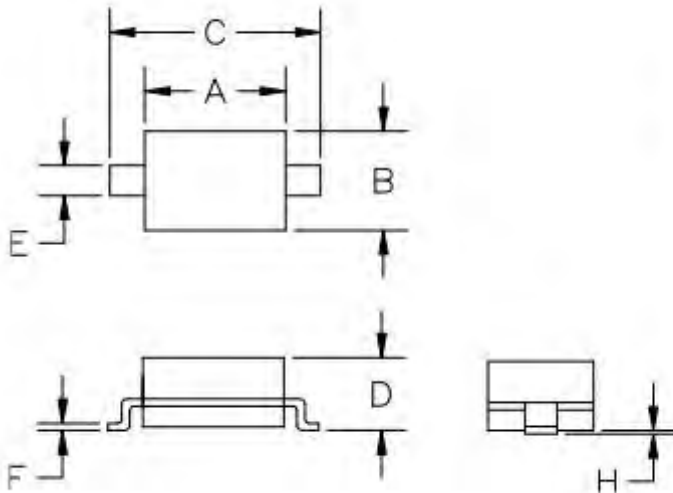
Note: 8/20 $\mu s$  pulse waveform.



## Typical Performance Characteristics

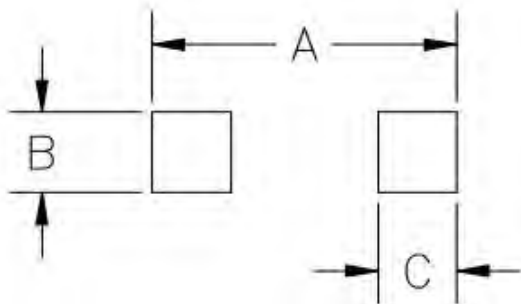


### Package Mechanical Data



SYM	DIMENSIONS			
	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	-	1.10	-	0.043
E	0.30	0.40	0.012	0.016
F	0.10	0.25	0.004	0.010
H	-	0.10	-	0.004

### Suggested Land Pattern



SYM	DIMENSIONS	
	MILLIMETERS	INCHES
A	3.15	0.120
B	0.80	0.031
C	0.80	0.031

### Package Information

Order code	Package	Base qty	Delivery mode
PTD322H120S15C35	SOD-323	3K	Tape and reel