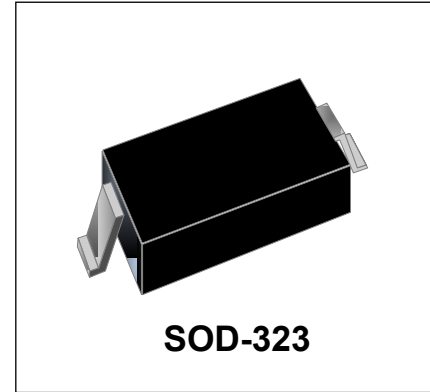




## Features

- 500 Watts Peak Pulse Power per Line ( $t_p = 8/20\mu s$ )
- Protects one I/O or power line
- Low Clamping Voltage
- Working Voltage: 24V
- Low Leakage Current
- Response Time is Typically  $< 1$  ns



## IEC Compatibility (EN61000-4)

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

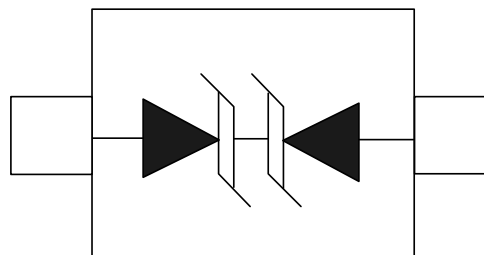
## Mechanical Characteristics

- JEDEC SOD-323 package
- Molding compound flammability rating:  
UL 94V-0
- Marking : Marking Code
- Packaging : Tape and Reel per EIA 481
- RoHS Compliant

## Applications

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

## Schematic & PIN Configuration

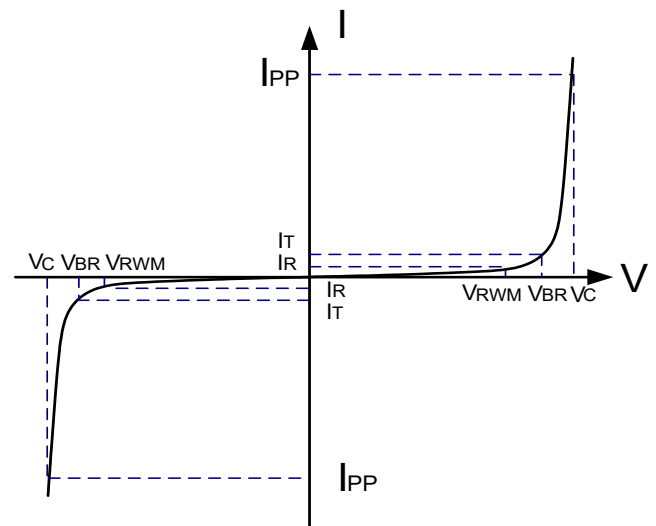


SOD-323 (Top View)

Absolute Maximum Rating			
Rating	Symbol	Value	Units
Peak Pulse Power ( $t_p = 8/20\mu s$ )	$P_{PP}$	500	Watts
Peak Forward Voltage ( $I_F = 1A, t_p = 8/20\mu s$ )	$V_{FP}$	1.3	V
Operating Temperature	$T_J$	-55 to +125	$^{\circ}C$
Storage Temperature	$T_{STG}$	-55 to +150	$^{\circ}C$

### Electrical Parameters (T=25 $^{\circ}C$ )

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



### Electrical Characteristics

SD24C						
Parameter	Symbol	Conditions	Minimum	Typical	Maximum	Units
Reverse Stand-Off Voltage	$V_{RWM}$				24.0	V
Reverse Breakdown Voltage	$V_{BR}$	$I_T = 1mA$	26.7			V
Reverse Leakage Current	$I_R$	$V_{RWM} = 24V, T = 25^{\circ}C$			1	$\mu A$
Peak Pulse Current	$I_{PP}$	$t_p = 8/20\mu s$			8	A
Clamping Voltage	$V_C$	$I_{PP} = 8A, t_p = 8/20\mu s$		47	50	V
Junction Capacitance	$C_j$	$V_R = 0V, f = 1MHz$		25	30	pF

## Typical Characteristics

Figure 1: Peak Pulse Power vs. Pulse Time

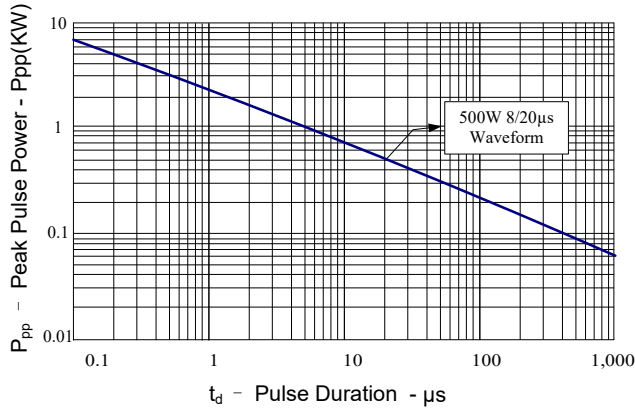


Figure 2: Power Derating Curve

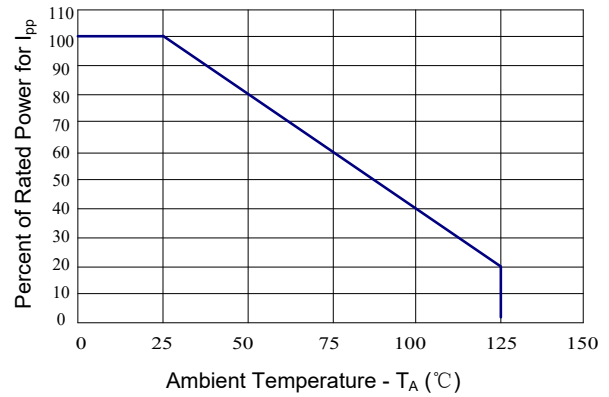


Figure 3: Clamping Voltage vs. Peak Pulse Current

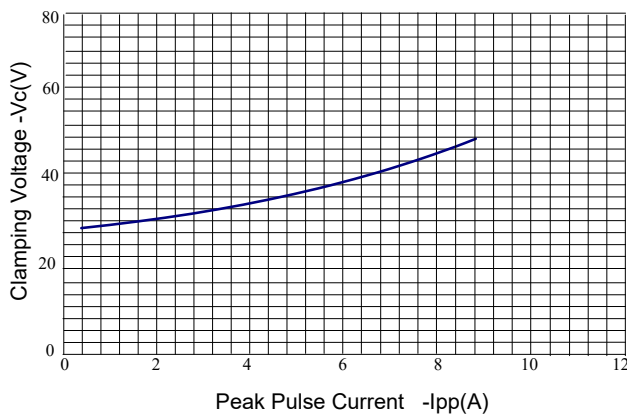


Figure 4: Normalized Junction Capacitance vs. Reverse Voltage

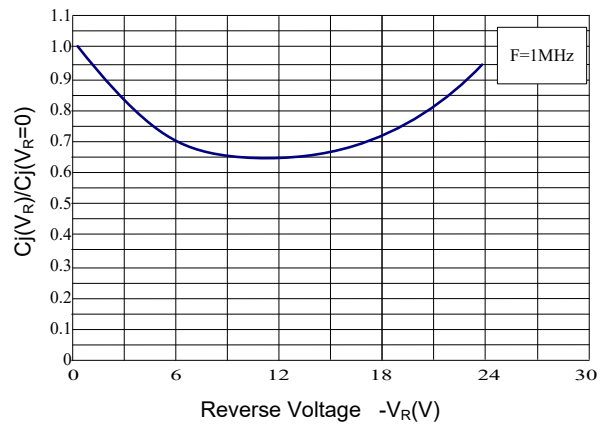
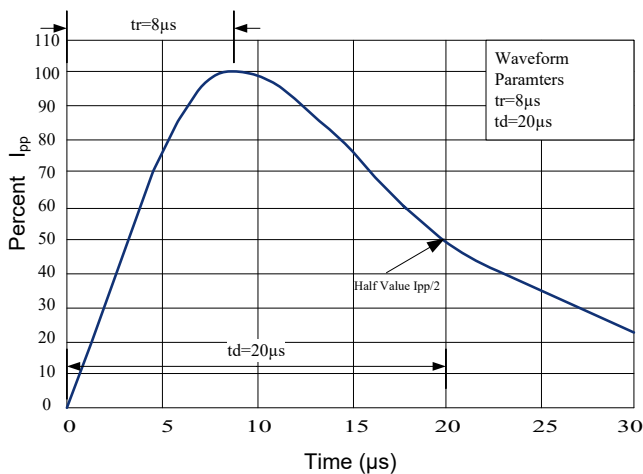
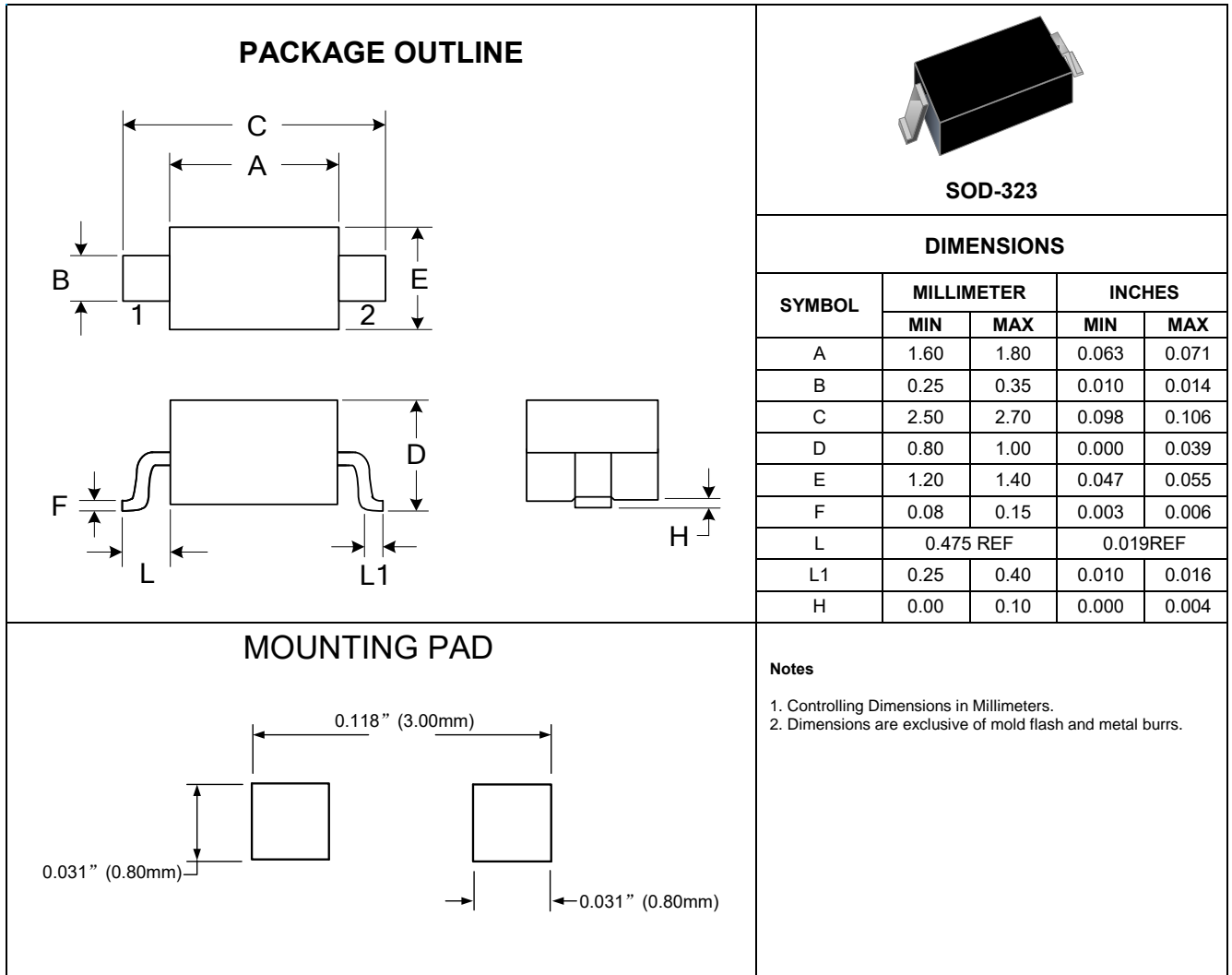


Figure 5: Pulse Waveform

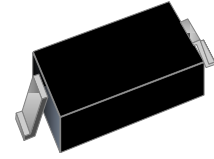
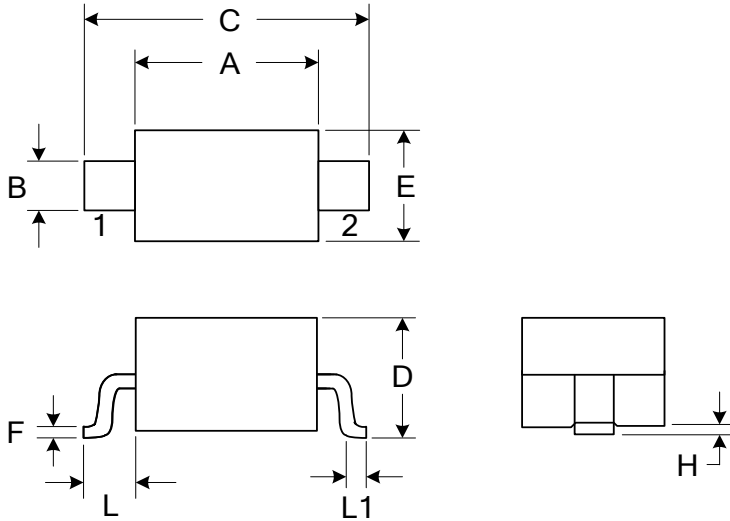




## Outline Drawing – SOD-323



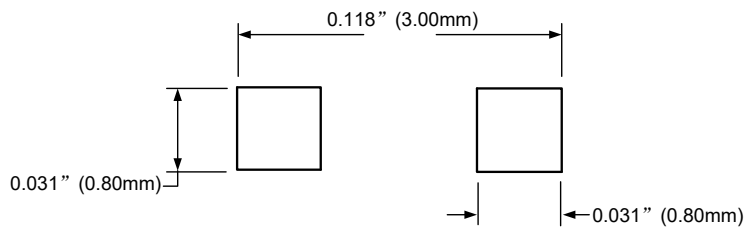
### PACKAGE OUTLINE



SOD-323

### DIMENSIONS

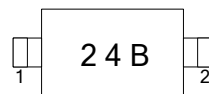
### MOUNTING PAD



### Notes

- Controlling Dimensions in Millimeters.
- Dimensions are exclusive of mold flash and metal burrs.

## Marking Codes



## Package Information

Qty: 3k/Reel

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