



## Features

- 540 watts peak pulse power ( $t_p = 8/20\mu s$ )
- Protects one I/O or power line
- Working Voltages: 36V
- Low Leakage Current
- Response Time is Typically  $< 1$  ns

## IEC Compatibility (EN61000-4)

- IEC 61000-4-2 (ESD)  $\pm 18$ kV (air),  $\pm 15$ kV (contact)
- IEC 61000-4-4 (EFT) 40A (5/50ns)
- IEC 61000-4-5 (Lightning) 5A (8/20 $\mu s$ )



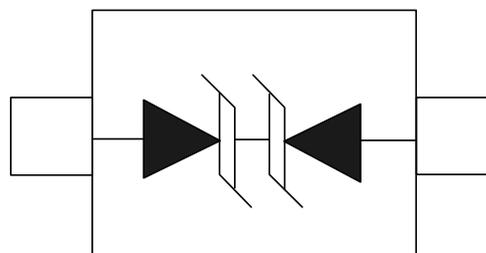
## Mechanical Characteristics

- 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

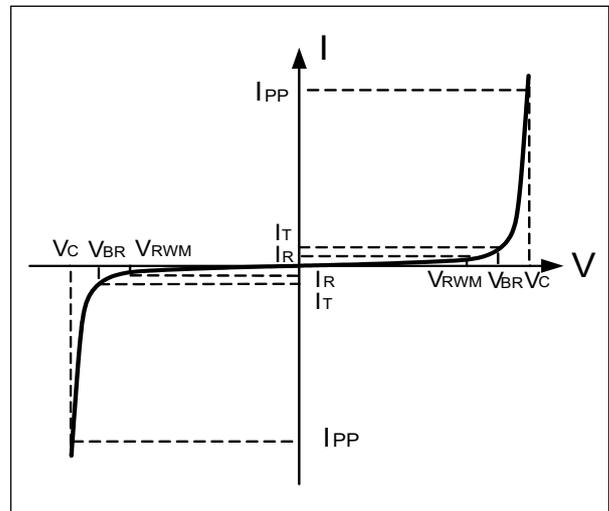


SOD-323 (Top View)

<b>Absolute Maximum Rating</b>			
<b>Rating</b>	<b>Symbol</b>	<b>Value</b>	<b>Units</b>
Peak Pulse Power ( $t_p = 8/20\mu s$ )	$P_{PP}$	540	W
Peak Pulse Current ( $t_p = 8/20\mu s$ )	$I_{PP}$	5	A
Operating Temperature	$T_J$	-55 to + 125	°C
Storage Temperature	$T_{STG}$	-55 to +150	°C

### Electrical Parameters (T=25°C )

<b>Symbol</b>	<b>Parameter</b>
$I_{PP}$	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
$I_F$	Forward Current
$V_F$	Forward Voltage @ $I_F$



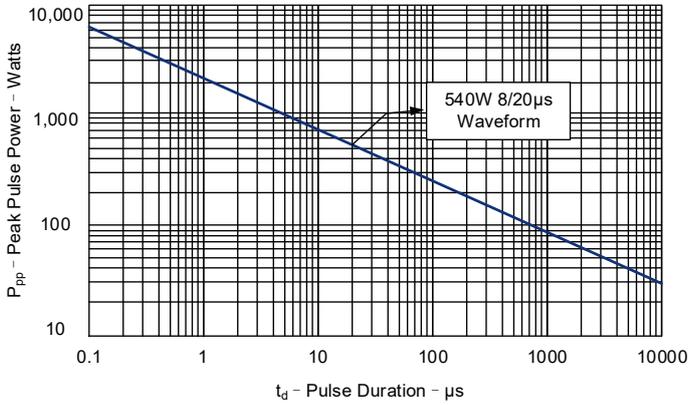
### Electrical Characteristics

<b>SD36C</b>						
<b>Parameter</b>	<b>Symbol</b>	<b>Conditions</b>	<b>Minimum</b>	<b>Typical</b>	<b>Maximum</b>	<b>Units</b>
Reverse Stand-Off Voltage	$V_{RWM}$				36	V
Reverse Breakdown Voltage	$V_{BR}$	$I_T = 1mA$	40			V
Reverse Leakage Current	$I_R$	$V_{RWM} = 36V, T = 25^\circ C$			1	$\mu A$
Peak Pulse Current	$I_{PP}$	$t_p = 8/20\mu s$			5	A
Maximum Clamping Voltage	$V_C$	$I_{PP} = 5A, t_p = 8/20\mu s$			105	V
Junction Capacitance	$C_j$	$V_R = 0V, f = 1MHz$		15		pF

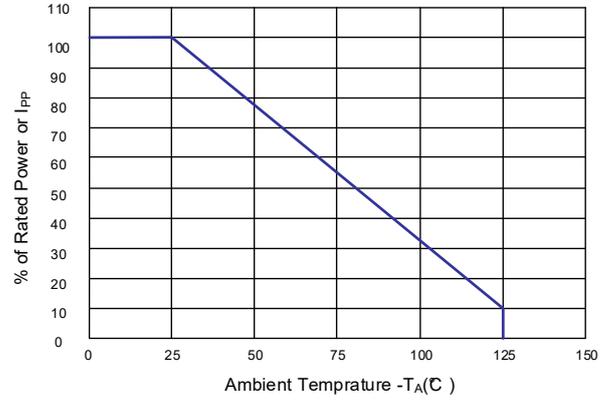


### Typical Characteristics

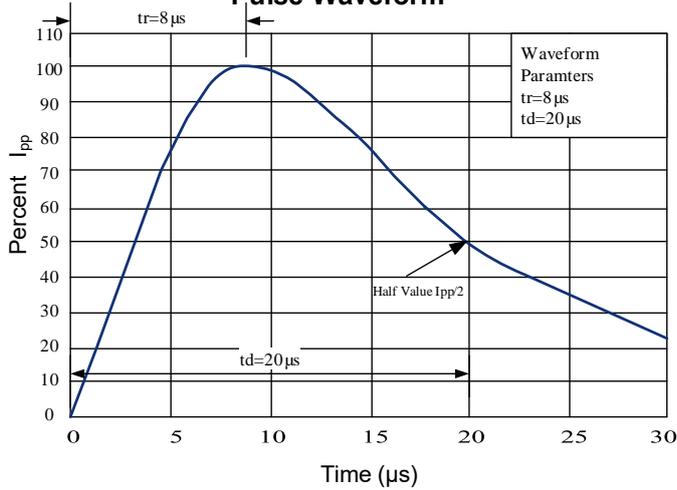
#### Peak Pulse Power vs. Pulse Time



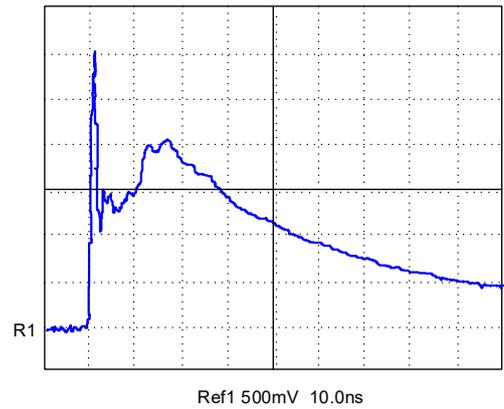
#### Power Derating Curve



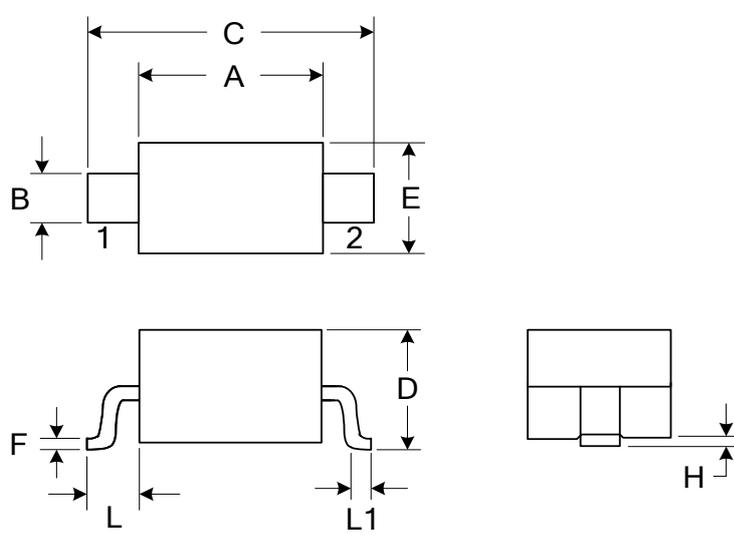
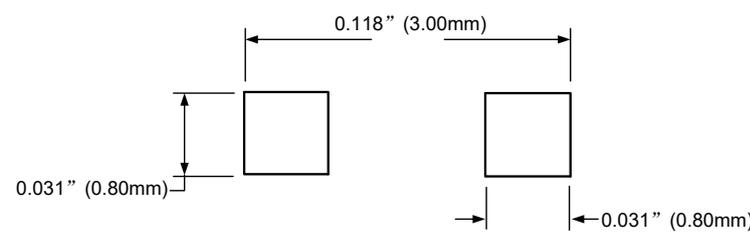
#### Pulse Waveform



#### ESD Pulse Waveform (Per IEC 61000-4-2)



## Outline Drawing – SOD-323

PACKAGE OUTLINE		DIMENSIONS																																																							
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MOUNTING PAD		<p><b>Notes</b></p> <p>1. Controlling Dimensions in Millimeters. 2. Dimensions are exclusive of mold flash and metal burrs.</p>																																																							
																																																									

## Marking Codes

Part Number	Marking Code
SD36C	

## Package Information

Qty: 3k/Reel

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