

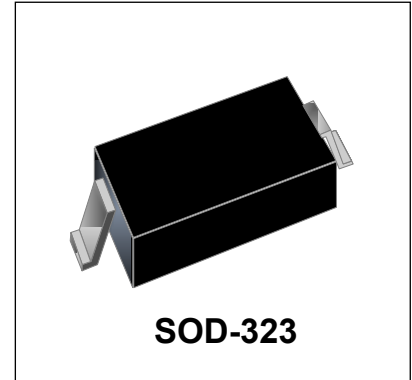


Features

- 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 $< 1\text{ ns}$

IEC Compatibility (EN61000-4)

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



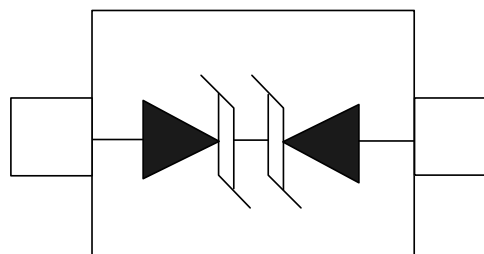
Mechanical Characteristics

- 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

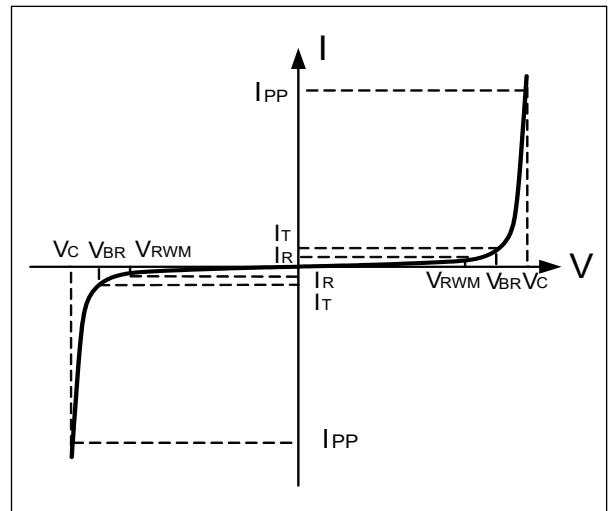


SOD-323 (Top View)

Absolute Maximum Rating			
Rating	Symbol	Value	Units
Peak Pulse Power ($t_p = 8/20\mu s$)	P_{PP}	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)

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
I_F	Forward Current
V_F	Forward Voltage @ I_F



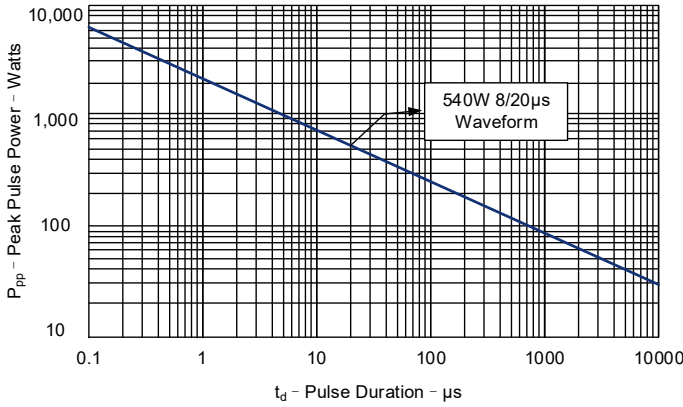
Electrical Characteristics

DW36D-B-S						
Parameter	Symbol	Conditions	Minimum	Typical	Maximum	Units
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	μA
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

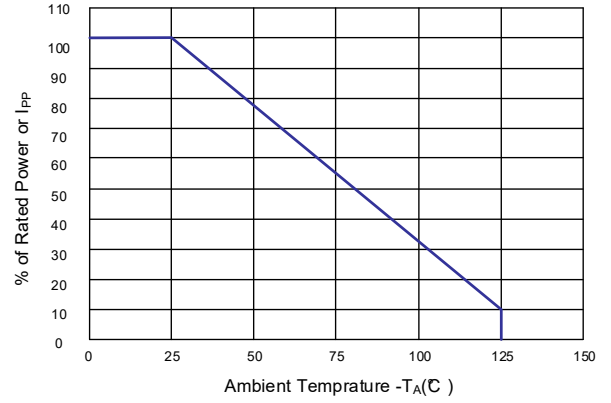


Typical Characteristics

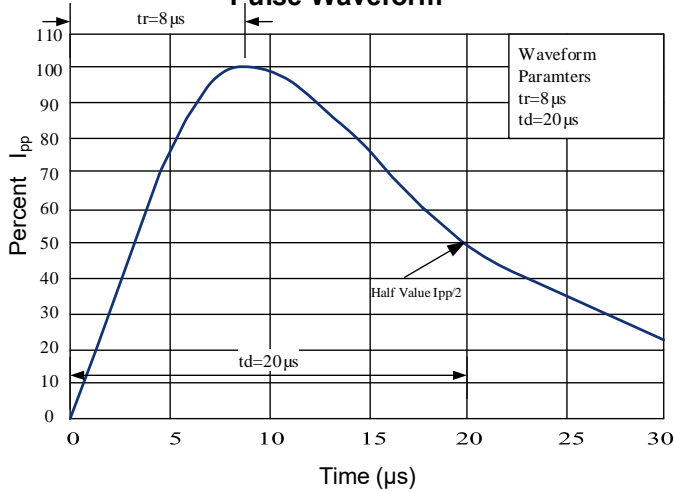
Peak Pulse Power vs. Pulse Time



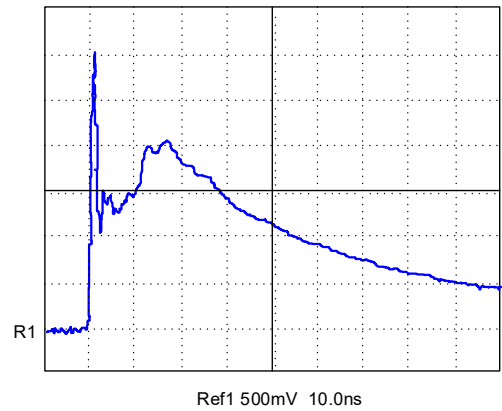
Power Derating Curve



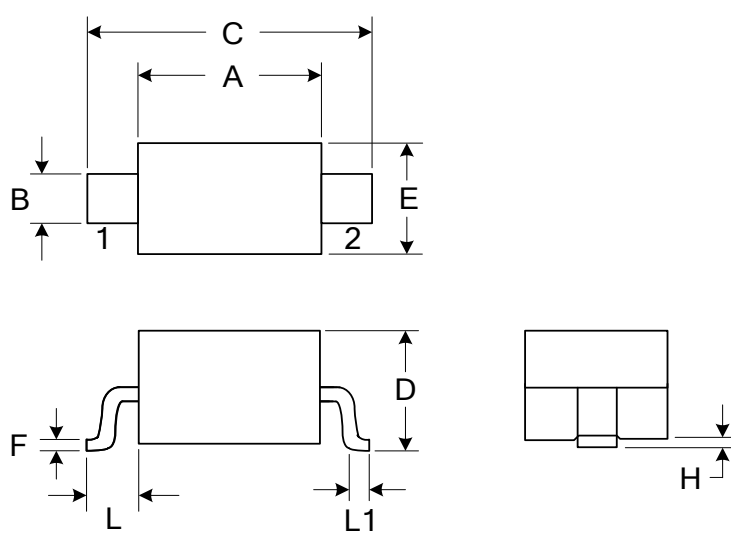
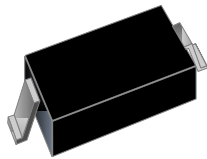
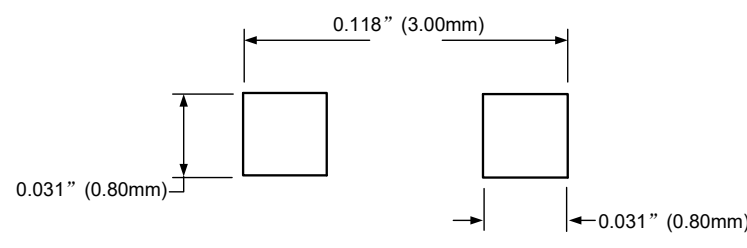
Pulse Waveform




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



Outline Drawing – SOD-323

PACKAGE OUTLINE		DIMENSIONS																																																							
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						<table border="1"> <thead> <tr> <th rowspan="2">SYMBOL</th> <th colspan="2">MILLIMETER</th> <th colspan="2">INCHES</th> </tr> <tr> <th>MIN</th> <th>MAX</th> <th>MIN</th> <th>MAX</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>1.60</td> <td>1.80</td> <td>0.063</td> <td>0.071</td> </tr> <tr> <td>B</td> <td>0.25</td> <td>0.35</td> <td>0.010</td> <td>0.014</td> </tr> <tr> <td>C</td> <td>2.50</td> <td>2.70</td> <td>0.098</td> <td>0.106</td> </tr> <tr> <td>D</td> <td>0.80</td> <td>1.00</td> <td>0.031</td> <td>0.039</td> </tr> <tr> <td>E</td> <td>1.20</td> <td>1.40</td> <td>0.047</td> <td>0.055</td> </tr> <tr> <td>F</td> <td>0.08</td> <td>0.15</td> <td>0.003</td> <td>0.006</td> </tr> <tr> <td>L</td> <td colspan="2">0.475 REF</td> <td colspan="2">0.019REF</td> </tr> <tr> <td>L1</td> <td>0.25</td> <td>0.40</td> <td>0.010</td> <td>0.016</td> </tr> <tr> <td>H</td> <td>0.00</td> <td>0.10</td> <td>0.000</td> <td>0.004</td> </tr> </tbody> </table>				SYMBOL	MILLIMETER		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	0.80	1.00	0.031	0.039	E	1.20	1.40	0.047	0.055	F	0.08	0.15	0.003	0.006	L	0.475 REF		0.019REF		L1	0.25	0.40	0.010
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MOUNTING PAD		<p>Notes</p> <p>1. Controlling Dimensions in Millimeters. 2. Dimensions are exclusive of mold flash and metal burrs.</p>																																																							
																																																									

Marking Codes

Part Number	Marking Code
DW36D-B-S	

Package Information

Qty: 3k/Reel