
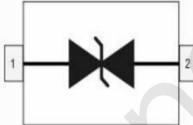
	<p>1-Line Bidirectional ESD Protection Diode</p>	<p>SOD323</p>									
<p>schematic & pin configuration</p>											
<p>simplified outline</p>	<p>Graphic symbol</p>										
											
<p><u>General description</u></p>											
<p>These surge protection diodes are designed for applications requiring transient overvoltage protection capability. They are intended for use in voltage and ESD Sensitive equipment such as computers, printers, business machines, communication systems, medical equipment and other applications. These devices are ideal for situations where board space is at a premium.</p>											
<p><u>Features and benefits</u></p>											
<ul style="list-style-type: none"> · Bidirectional ESD Protection of one line · Femtofarad capacitance: G_j = 10PF (Max) • Response time is typically < 1 ns · Low clamping voltage V_c = 40v · ultra Low Leakage: nA Level · IEC 61000-4-2; level 4 (ESD) · IEC 61000-4-5 (surge); I_{PPM} = 4A 											
<p><u>Application information</u></p>											
<ul style="list-style-type: none"> · cell phone Handsets and Accessories · Microprocessor based equipment · personal Digital Assistants (PDA's) · Notebooks, Desktops, and servers 											
<p>ordering information</p>											
<table border="1"> <thead> <tr> <th>Device</th> </tr> </thead> <tbody> <tr> <td>SD24CS</td> </tr> </tbody> </table>	Device	SD24CS	<table border="1"> <thead> <tr> <th>package</th> </tr> </thead> <tbody> <tr> <td>SOD323</td> </tr> </tbody> </table>	package	SOD323	<table border="1"> <thead> <tr> <th>packaging</th> </tr> </thead> <tbody> <tr> <td>3000/Tape & Reel</td> </tr> </tbody> </table>	packaging	3000/Tape & Reel	<table border="1"> <thead> <tr> <th>Reel size</th> </tr> </thead> <tbody> <tr> <td>7 Inch</td> </tr> </tbody> </table>	Reel size	7 Inch
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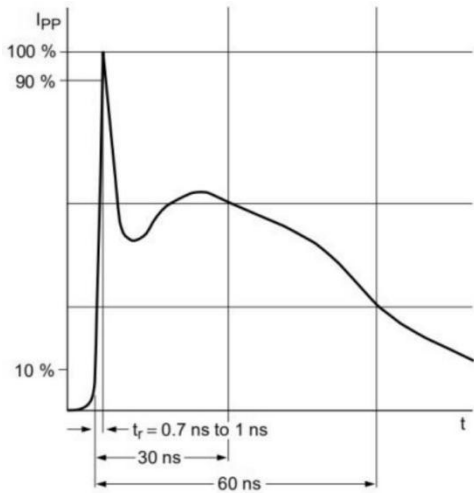
Maximum Ratings (Top = 25 °C, unless otherwise specified)

parameter	symbol	value	unit
peak pulse power (TP = 8/20us)	PPPM	160	W
Rated peak pulse current (TP = 8/20us)	IPPM	4	A
Maximum lead temperature for soldering during 10s	TL	260	°C
storage Temperature Range	Tstg	-55 to + 150	°C
operating Temperature Range	TOP	-40 to + 125	°C
Maximum junction temperature	Tj	150	°C
ESD Voltage IEC 61000-4-2 (air discharge)	VESD	20	kv

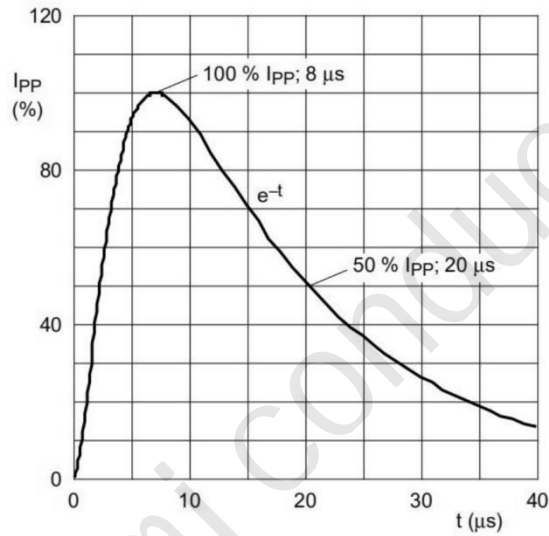
Electrical characteristics (Top = 25 °C, unless otherwise specified)

parameter	symbol	Min	TYP	Max	unit	condition
Reverse working voltage	VRWM	--	--	24.0	V	
Breakdown voltage	VBR	26.0	--	30.0	V	IT= 1mA
Leakage current Leak	IR	--	--	100	nA	VRWM=24V
clamping voltage	VC	--	28	30.0	V	Ipp= 1.0A, TP=8/20µS
clamping voltage	Vc	--	39	40.0	V	Ipp=4.0A, TP=8/20µS
Junction capacitance	Gj	--	10	12	PF	VR=OV, f= 1MHz

typical characteristics



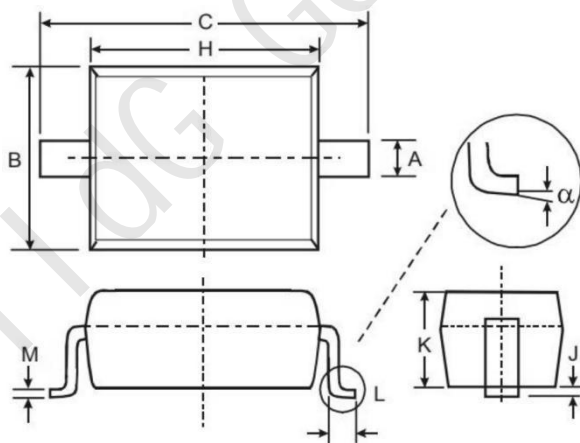
IEC61000-4-2 waveform



IEC6000-4-5 waveform(8/20us pulse)

package outline Dimensions

SOD323



SYMBOL	MILLIMETERS	
	MIN	MAX
A	0.25	0.35
B	1.20	1.40
C	2.40	2.70
H	1.60	1.80
J	0.01	0.15
K	0.80	1.00
L	0.20	0.40
M	0.08	0.15
α	0°	8°