

1-Line Bidirectional ESD Protection Diode

SOD923

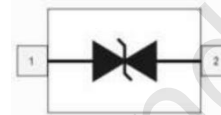
## schematic & pin configuration

simplified outline

Graphic symbol



Marking: B



## General description

The ESD9D3.3C is designed to protect voltage sensitive components from ESD and transient voltage events. Excellent clamping capability, low leakage, and fast response time, make these parts ideal for ESD protection on designs where board space is at a premium

## Features and benefits

- Low capacitance 15 PF(TYP)
- Reverse stand-off voltage: 3.3V Max
- Low leakage current: nA Level
- Low clamping voltage
- Response time is typically < 1 ns
- IEC61000-4-2 Level 4 ESD Protection

## Application information

- cell phones
- Audio equipment
- portable devices
- Digital cameras
- power supplies

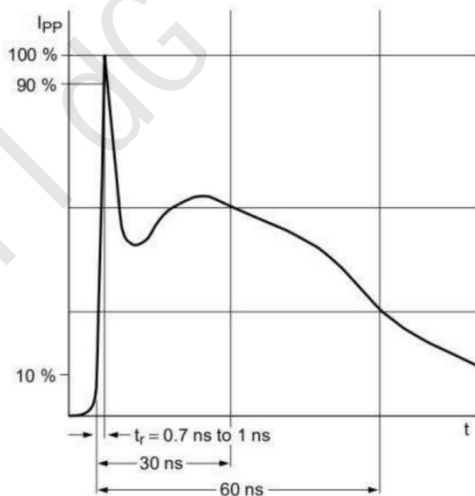
Maximum Ratings (Top = 25 ° c, unless otherwise specified)

parameter	symbol	value	unit
peak pulse power (tp = 8/20 μ S)	PPPM	110	W
peak pulse current (tp = 8/20 μ S)	I PPM	11	A
ESD Voltage IEC 61000-4-2 (air discharge)	VESD	30	kv
ESD Voltage IEC 61000-4-2 (contact discharge)	VESD	30	kv
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

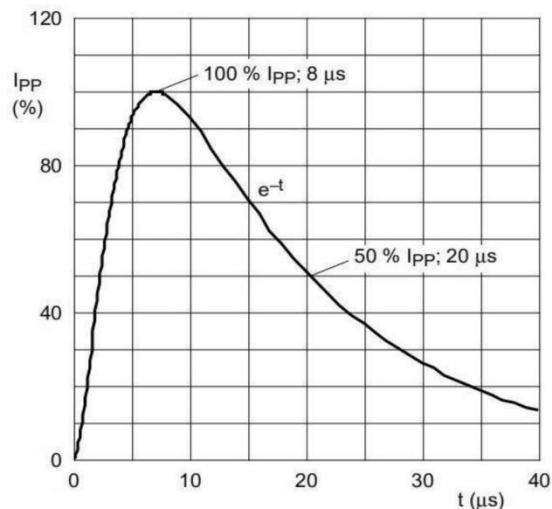
Electrical characteristics (Top = 25 ° c, unless otherwise specified)

parameter	symbol	Min	TYP	Max	unit	condition
Reverse working voltage	VRWM	--	--	3.3	V	
Breakdown voltage	VBR	3.5	--	5.0	V	IT= 1mA
Leakage current Leak	IR	--	--	100	nA	VRWM=3.3V
clamping voltage	VC	--	--	10.0	V	Ipp= 11A, TP=8/20μS
Junction capacitance	Cj	--	15	20	PF	VR=0V, f= 1MHz

### Typical Electrical and Thermal Characteristics (Curves)



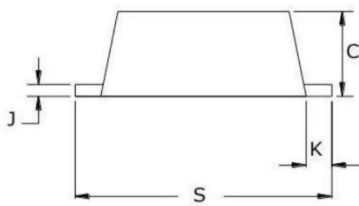
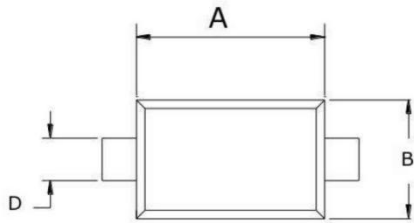
IEC61000-4-2 waveform



IEC 61000-4-5 waveform( 8/20μS Pulse)

package outline Dimensions

SOD923



SYMBOL	M ILLMETERS	
	MIN	MAX
A	0.74	0.86
B	0.54	0.66
C	0.35	0.45
D	0.14	0.26
K	0.04	0.16
S	0.95	1.10

soldering Footprint (mm)

