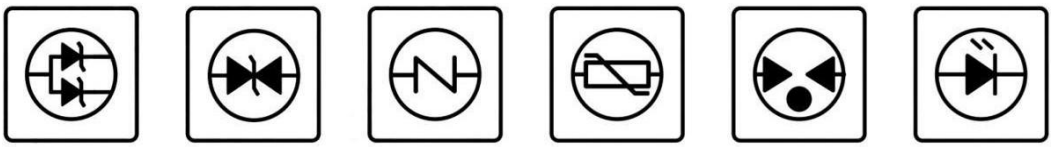
MSKSEMI 美森科
SEMICONDUCTOR



ESD9D3.3C-MS

Product specification

ESD9D3.3C-MS

1-Line Bidirectional ESD Protection Diode

General description

The ESD9D3.3C-MS 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

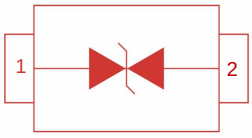
Features and benefits

- 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

Reference News

SOD-923	GRAPHIC SYMBOL	MARKING
		B*

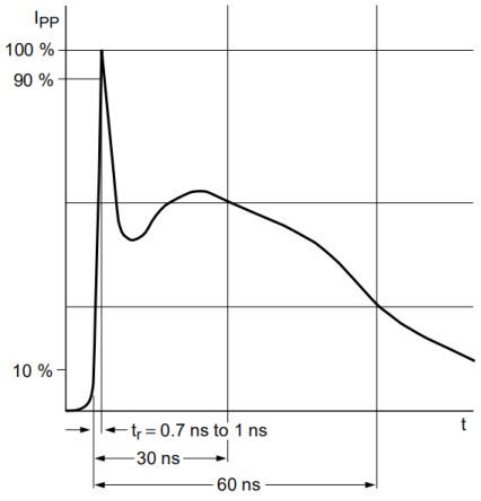
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Maximum Ratings (T_{OP} = 25°C, unless otherwise specified)

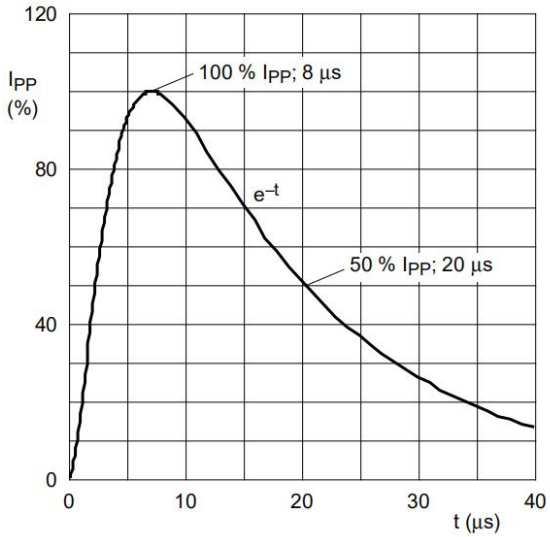
Parameter	Symbol	Value	Unit
Peak Pulse Power (tp = 8/20μs)	P_{PPM}	90	W
Peak Pulse Current (tp = 8/20μs)	I_{PPM}	9	A
ESD voltage IEC 61000-4-2 (air discharge)	V_{ESD}	30	kV
ESD voltage IEC 61000-4-2 (contact discharge)	V_{ESD}	30	kV
Maximum lead temperature for soldering during 10s	T_L	260	°C
Storage Temperature Range	T_{stg}	-55 to +150	°C
Operating Temperature Range	T_{OP}	-40 to +125	°C
Maximum junction temperature	T_j	150	°C

Electrical Characteristics (T_{OP} = 25°C, unless otherwise specified)

Parameter	Symbol	Min	Typ	Max	Unit	Condition
Reverse Working Voltage	V_{RWM}	--	--	3.3	V	
Breakdown Voltage	V_{BR}	4.2	--	5.5	V	I_T=1mA
Leakage Current ILeak	I_R	--	--	100	nA	V_{RWM}=3.3V
Clamping Voltage	V_C	--	--	10.0	V	I_{PP}=9A,Tp=8/20μs
Junction Capacitance	C_J	--	15	18	pF	V_R=0V, f=1MHz



IEC61000−4−2 Waveform

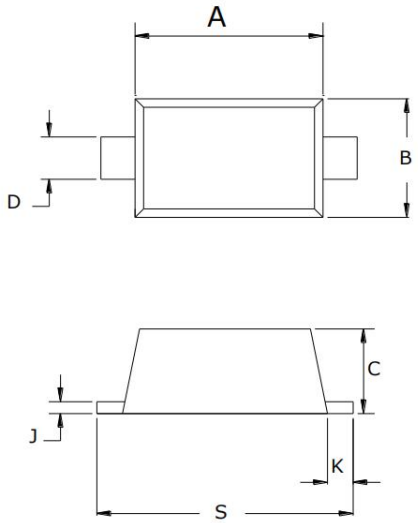


IEC 61000-4-5 Waveform(8/20μs pulse)

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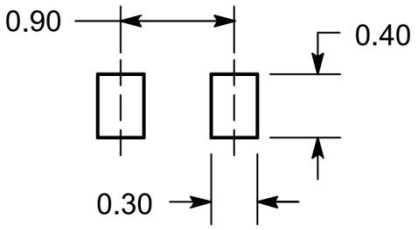
PackageOutlineDimensions

SOD923



SYMBOL	MILLIMETERS	
	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

SolderingFootprint (mm)



Order information

Orderable Device	Package	Packing Option
ESD9D3.3C-MS	SOD-923	8000PCS

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