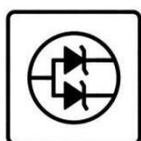


# MSKSEMI 美森科

SEMICONDUCTOR



ESD



TVS



TSS



MOV



GDT



PLED

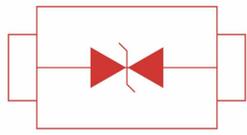
**PESD5V0S1BB-MS**

**Product specification**

**Features**

- Stand-off Voltage: 5V0
- Low Leakage
- Response Time is Typically < 1ns
- IEC61000-4-2 Level 4 ESD Protection
- RoHS Compliant
- Threen EMC
- Matte Tin(Sn) Lead Finish

**Reference News**

PACKAGE OUTLINE	Circuit Diagram	Marking
		
<b>SOD-523</b>		

**AbsoluteMaximumRatings** TA = 25°C unless otherwise noted

Symbol	Parameter	Value	Units
<b>Vpp</b>	IEC61000-4-2(ESD)	Air	± 15
		Contact	± 8
<b>ESD</b>	Per Human Body Model	16	KV
<b>Pd</b>	Power Dissipation (Note 1)	150	W
<b>STG</b>	Storage Temperature Range	-55 to + 150	°C
<b>TJ</b>	Operating Junction Temperature	+ 150	°C
<b>TL</b>	Max Lead Solder Temperature range(10 Second Duration)	260	°C

These ratings are limiting values above which the serviceability of the diode may be impaired. Note 1.  
FR-5 = 1.0 x 0.75 x 0.62 in.

**Electrical Characteristics** (TA = 25°C unless otherwise noted)

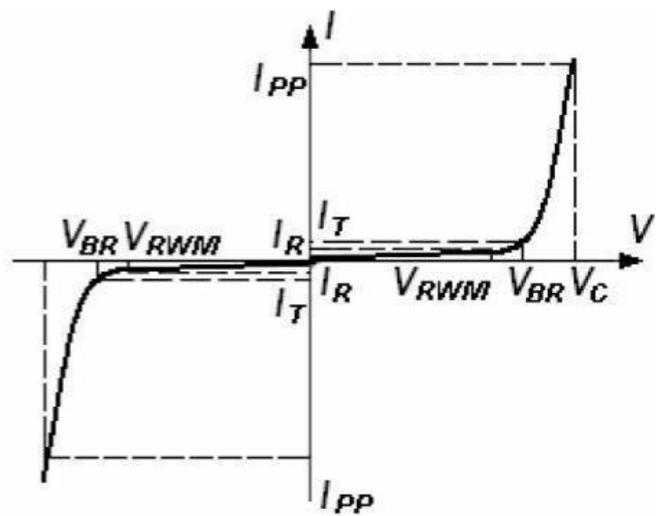
P/N	V <sub>RWM</sub> (Volts)	I <sub>R</sub> @ V <sub>RWM</sub> ( $\mu$ A)	V <sub>BR</sub> @ I <sub>T</sub> (Note 2) (Volts)		I <sub>T</sub> (mA)	I <sub>PP+</sub> (A)	V <sub>C</sub> @ Max I <sub>PP+</sub> (Volts)	P <sub>PK+</sub> (W)	C @ V <sub>R</sub> = 0V, f = 1MHz (pF)
	Max	Max	Min	Max		Max	Max	Max	Max
PESD5V0S1BB-MS	5.0	1	5.6	7.8	1.0	4	12	48	15

+ Surge current waveform per Figure 1.

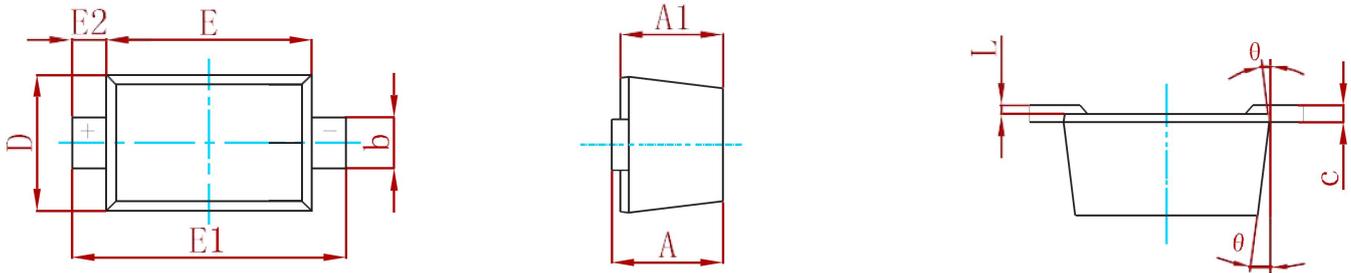
Note 2: **V<sub>BR</sub>** is measured with a pulse test current **I<sub>T</sub>** at an ambient temperature of 25°C.

**Electrical Parameter**

Symbol	Parameter
I <sub>PP</sub>	Maximum Reverse Peak Pulse Current
V <sub>C</sub>	Clamping Voltage @ I <sub>PP</sub>
V <sub>RWM</sub>	Working Peak Reverse Voltage
I <sub>R</sub>	Maximum Reverse Leakage Current @ V <sub>RWM</sub>
I <sub>T</sub>	Test Current
V <sub>BR</sub>	Breakdown Voltage @ I <sub>T</sub>

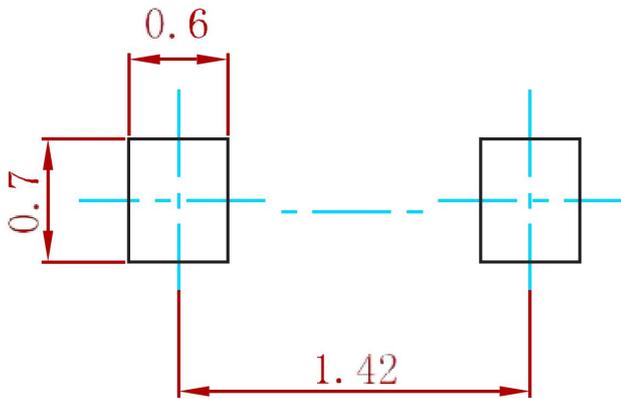


**PACKAGE MECHANICAL DATA**



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.510	0.770	0.020	0.031
A1	0.500	0.700	0.020	0.028
b	0.250	0.350	0.010	0.014
c	0.080	0.150	0.003	0.006
D	0.750	0.850	0.030	0.033
E	1.100	1.300	0.043	0.051
E1	1.500	1.700	0.059	0.067
E2	0.200 REF		0.008 REF	
L	0.010	0.070	0.001	0.003
Ø	7° REF		7° REF	

**Suggested Pad Layout**



Note:

1. Controlling dimension: in millimeters.
2. General tolerance:  $\pm 0.05\text{mm}$ .
3. The pad layout is for reference purposes only.

**REEL SPECIFICATION**

P/N	PKG	QTY
PESD5V0S1BB-MS	SOD-523	3000

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