

MSKSEMI

SEMICONDUCTOR



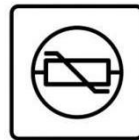
ESD



TVS



TSS



MOV



GDT

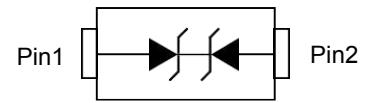


PLED

Product data sheet

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



Circuit Diagram

SOD-523

Absolute Maximum Ratings $T_A = 25^\circ\text{C}$ unless otherwise noted

Symbol	Parameter	Value	Units
Vpp	IEC61000-4-2(ESD) Air Contact	± 15 ± 8	KV
ESD	Per Human Body Model	16	KV
Pd	Power Dissipation (Note 1)	150	mW
T_{STG}	Storage Temperature Range	-55 to +150	°C
T_J	Operating Junction Temperature	+150	°C
T_L	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 ($T_A = 25^\circ\text{C}$ unless otherwise noted)

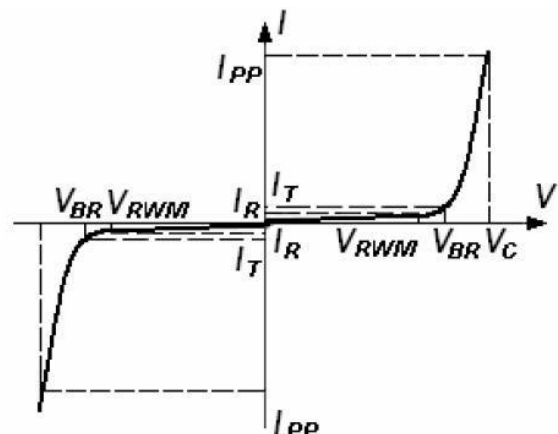
P/N	V_{RWM} (Volts)	I_R @ V_{RWM} (μA)	V_{BR} @ I_T (Note 2) (Volts)		I_T (mA)	I_{PP+} (A)	V_C @ Max I_{PP+} (Volts)	P_{PK+} (W)	C @ V_R = 0V, f = 1MHz (pF)
	Max	Max	Min	Max		Max	Max	Max	Typ.
PESD5V0S1BB-MS	5.0	1	5.6	7.8	1.0	4	12	48	15

+ Surge current waveform per Figure 1.

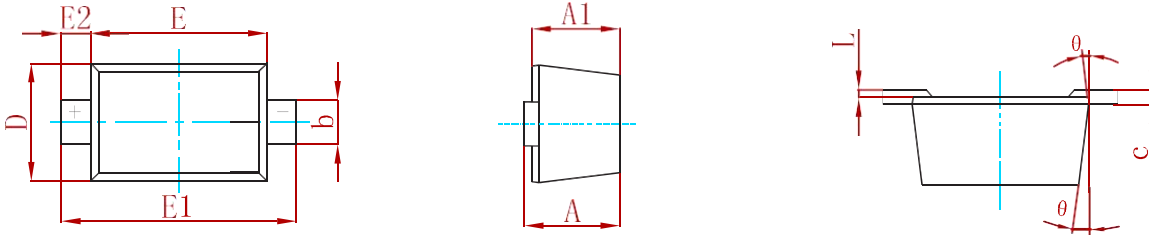
Note 2: V_{BR} is measured with a pulse test current I_T at an ambient temperature of 25°C .

Electrical Parameter

Symbol	Parameter
I_{PP}	Maximum Reverse Peak Pulse Current
V_C	Clamping Voltage @ I _{PP}
V_{RWM}	Working Peak Reverse Voltage
I_R	Maximum Reverse Leakage Current @ V _{RWM}
I_T	Test Current
V_{BR}	Breakdown Voltage @ I _T

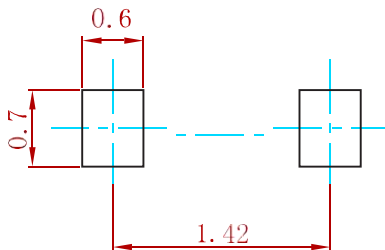


PACKAGE MECHANICAL DATA



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
0	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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