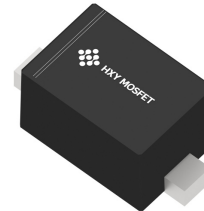




Discription

The PESD5V0S1BB,115 protects sensitive semiconductor components from damage or upset due to electrostatic discharge (ESD) and other voltage induced transient events. Excellent clamping capability, low leakage, low capacitance, and fast response time provide best in class protection on designs that are exposed to ESD.

It gives designer the flexibility to protect one bi-directional line in applications where arrays are not practical.



SOD-523

Features

- ★ Reverse stand-off voltage: 5V Max
- ★ Low leakage current: nA Level
- ★ Low Clamping Voltage
- ★ Response time is typically
- ★ IEC61000-4-2 Level 4 ESD Protection



Circuit Diagram

Ordering Information

Product ID	Pack	Qty(PCS)
PESD5V0S1BB,115	SOD-523	3000

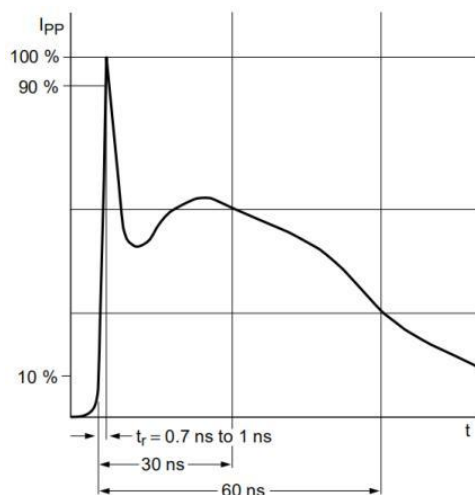
Absolute Ratings ($T_{amb}=25^{\circ}\text{C}$)

Symbol	Parameter	Value	Units
P_{PP}	Peak Pulse Power ($t_p = 8/20 \mu s$)	100	W
T_L	Maximum lead temperature for soldering during 10s	260	$^{\circ}\text{C}$
T_{stg}	Storage Temperature Range	-55 to +155	$^{\circ}\text{C}$
T_{op}	Operating Temperature Range	-40 to +125	$^{\circ}\text{C}$
T_j	Maximum junction temperature	150	$^{\circ}\text{C}$
	IEC61000-4-2 (ESD) air discharge	± 30	KV
	IEC61000-4-4 (EFT) contact discharge	± 30	KV
	IEC61000-4-4 (EFT)	11	A

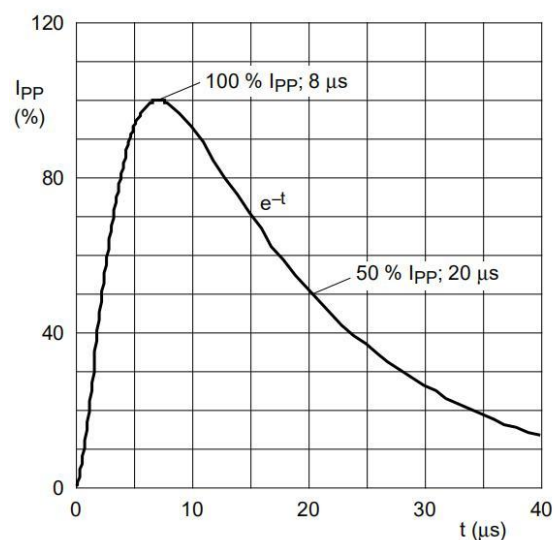


Electrical Characteristics Ratings at 25°C ambient temperature unless otherwise specified. VF = 0.9V at IF = 10mA

Parameter	Symbol	Min	Typ	Max	Unit	Condition
Reverse Working Voltage	VRWM	--	--	5.0	V	
Breakdown Voltage	VBR	5.6	--	--	V	IT=1mA
Leakage Current ILeak	IR	--	--	100	nA	VRWM=5V
Clamping Voltage	VC	--	--	9.0	V	Ipp=11A, TP=8/20μs
Junction Capacitance	CJ	--	20	25	pF	VR=0V, f=1MHz



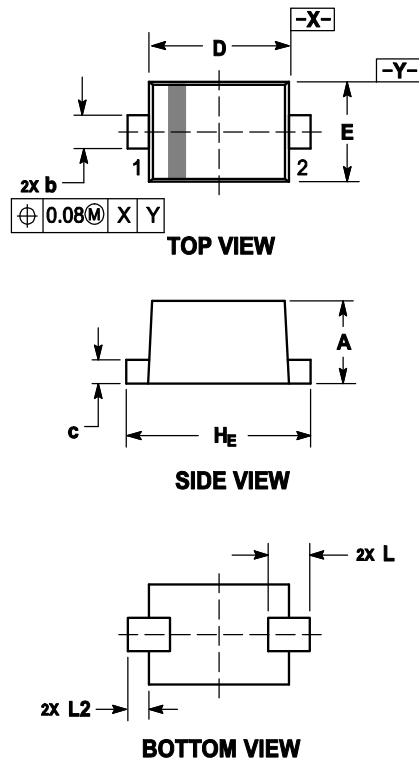
IEC61000-4-2 Waveform



IEC 61000-4-5 Waveform(8/20μs pulse)



Outline And Dimensions

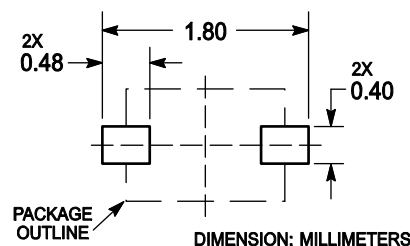


Notes:

1. DIMENSIONING AND TOLERANCING PER ANSI Y14.5M, 1982.
2. CONTROLLING DIMENSION: MILLIMETERS.
3. MAXIMUM LEAD THICKNESS INCLUDES LEAD FINISH. MINIMUM LEAD THICKNESS IS THE MINIMUM THICKNESS OF BASE MATERIAL.
4. DIMENSIONS D AND E DO NOT INCLUDE MOLD FLASH, PROTRUSIONS OR GATE BURRS.

DIM	MILLIMETERS			INCHES		
	MIN	NOM	MAX	MIN	NOM	MAX
A	0.50	0.60	0.70	0.020	0.024	0.028
b	0.25	0.30	0.35	0.010	0.012	0.014
c	0.07	0.14	0.20	0.003	0.006	0.008
D	1.10	1.20	1.30	0.043	0.047	0.051
E	0.70	0.80	0.90	0.028	0.031	0.035
H _E	1.50	1.60	1.70	0.059	0.063	0.067
L	0.30 REF			0.012 REF		
L ₂	0.15	0.20	0.25	0.006	0.008	0.010

Soldering Footprint





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