

E5V0SBWA1A-CH

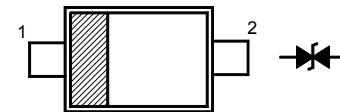
ESD Protection Diode

Features

- AEC-Q101 Qualified
- Low capacitance
- Low leakage current
- Halogen and Antimony Free(HAF), RoHS compliant

PINNING

PIN	DESCRIPTION
1	Anode
2	Anode



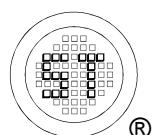
Top View
Simplified outline SOD-123 and symbol

Absolute Maximum Ratings ($T_a = 25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Value	Unit
Peak Pulse Power ($tp = 8/20 \mu\text{s}$)	P_{PK}	30	W
Peak Pulse Current ($tp = 8/20 \mu\text{s}$)	I_{PP}	3	A
IEC61000-4-2 (ESD)	Air Contact	V_{ESD}	± 30 ± 30
Operating Junction Temperature	T_j	125	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	- 55 to + 150	$^\circ\text{C}$

Characteristics at $T_a = 25^\circ\text{C}$

Parameter	Symbol	Min.	Typ.	Max.	Unit
Reverse Stand-Off Voltage	V_{RWM}	-	-	5	V
Reverse Breakdown Voltage at $I_R = 1 \text{ mA}$	$V_{(BR)R}$	5.4	-	8	V
Reverse Current at $V_{RWM} = 5 \text{ V}$	I_R	-	-	100	nA
Clamping Voltage at $I_{PP} = 3 \text{ A}$, $tp = 8/20 \mu\text{s}$	V_C	-	-	10	V
Junction Capacitance at $V_R = 0 \text{ V}$, $f = 1 \text{ MHz}$	C_j	-	13	20	pF



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Electrical Characteristic Curves

Fig 1. Pulse Waveform

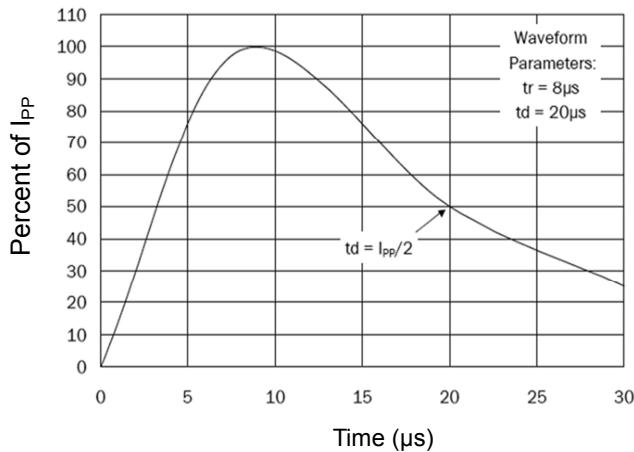


Fig 2. Power Derating Curve

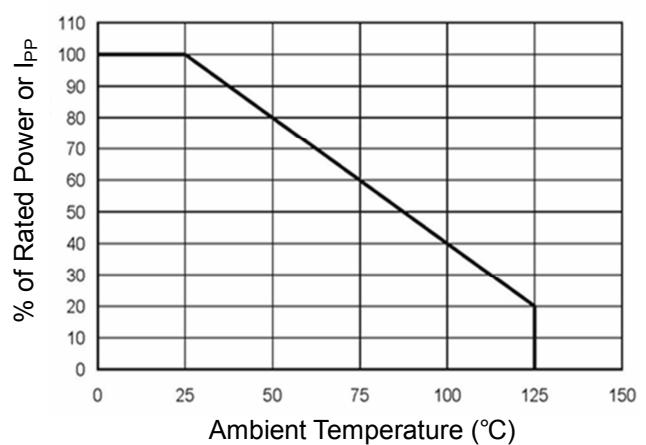


Fig 3. Clamping Voltage Curve

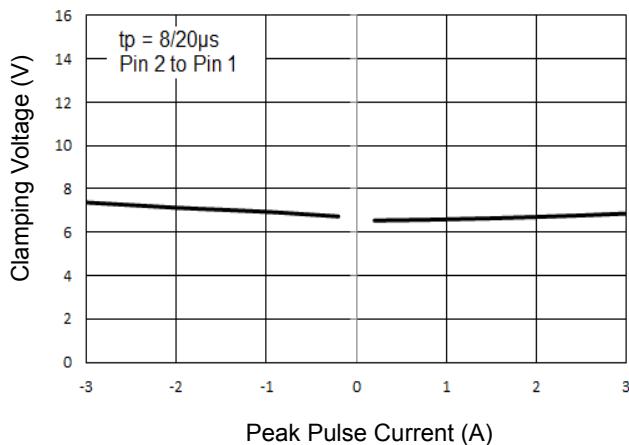
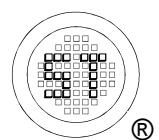
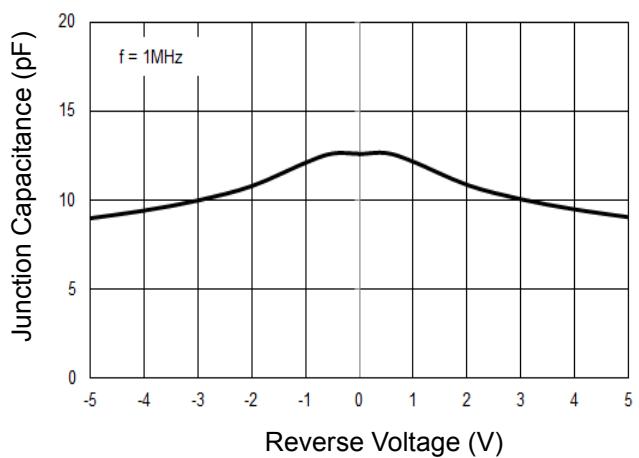


Fig 4. Junction Capacitance

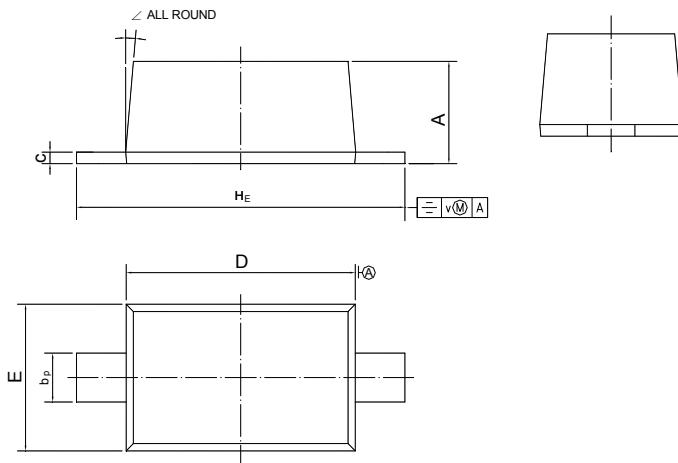


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PACKAGE OUTLINE

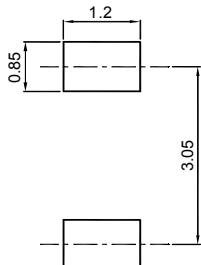
Plastic surface mounted package; 2 leads

SOD-123



UNIT	A	b _p	c	D	E	H _E	v	∠
mm	1.15 1.05	0.6 0.5	0.135 0.100	2.7 2.6	1.65 1.55	3.85 3.55	0.2	5°
inch								

Recommended Soldering Footprint



Packing information

Package	Tape Width (mm)	Pitch		Reel Size		Per Reel Packing Quantity
		mm	(inch)	mm	(inch)	
SOD-123	8	4 ± 0.1	0.157 ± 0.004	178	7	3,000

Marking information

" ZZ1 " = Part No.

" III " = Marking line

" • " = HAF (Halogen and Antimony Free)

Font type: Arial



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