

SS1060HEWS-AU

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

Voltage

60 V

Current

1 A

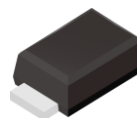
Features

- Low forward voltage drop
- Deal for automated placement
- Low power loss, high efficiency
- High surge current capability
- Lead free in compliance with EU RoHS 2.0
- Green molding compound as per IEC 61249 standard
- AEC-Q101 qualified

Mechanical Data

- Case: SOD-323HE Package
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 0.0002 ounces, 0.005 grams

SOD-323HE



Maximum Ratings and Thermal Characteristics ($T_A = 25^\circ\text{C}$ unless otherwise noted)

PARAMETER	SYMBOL	LIMIT	UNITS
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	60	V
Maximum Rms Voltage	V_{RMS}	42	V
Maximum Dc Blocking Voltage	V_{DC}	60	V
Maximum Average Forward Current	$I_{F(AV)}$	1	A
Peak Forward Surge Current: 8.3 ms single half sine-wave superimposed on rated load per diode	I_{FSM}	22	A
Typical Junction Capacitance Measured at 1 MHz And Applied $V_R = 4V$	C_J	35	pF
Typical Thermal Resistance	$R_{\theta JA}^{(1)}$	300	$^\circ\text{C/W}$
	$R_{\theta JA}^{(2)}$	220	
	$R_{\theta JL}^{(2)}$	50	
Operating Junction Temperature Range	T_J	-40~150	$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-40~150	$^\circ\text{C}$



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Electrical Characteristics ($T_A = 25^{\circ}\text{C}$ unless otherwise noted)

PARAMETER	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNITS
Forward Voltage	V_F	$I_F = 0.1\text{ A}, T_J = 25^{\circ}\text{C}$	-	-	0.43	V
		$I_F = 0.7\text{ A}, T_J = 25^{\circ}\text{C}$	-	-	0.58	
		$I_F = 1\text{ A}, T_J = 25^{\circ}\text{C}$	-	-	0.68	
		$I_F = 0.1\text{ A}, T_J = 125^{\circ}\text{C}$	-	0.24	-	
		$I_F = 0.7\text{ A}, T_J = 125^{\circ}\text{C}$	-	0.48	-	
		$I_F = 1\text{ A}, T_J = 125^{\circ}\text{C}$	-	0.54	-	
Reverse Current	$I_R^{(3)}$	$V_R = 5\text{ V}, T_J = 25^{\circ}\text{C}$	-	0.3	-	uA
		$V_R = 60\text{ V}, T_J = 25^{\circ}\text{C}$	-	-	100	
		$V_R = 60\text{ V}, T_J = 125^{\circ}\text{C}$	-	1.8	-	mA

NOTES:

1. Mounted on a FR4 PCB, single-sided copper, mini pad.
2. Mounted on a FR4 PCB, single-sided copper, with 15 mm x 50 mm copper pad area
3. Short duration pulse test used to minimize self-heating effect

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TYPICAL CHARACTERISTIC CURVES

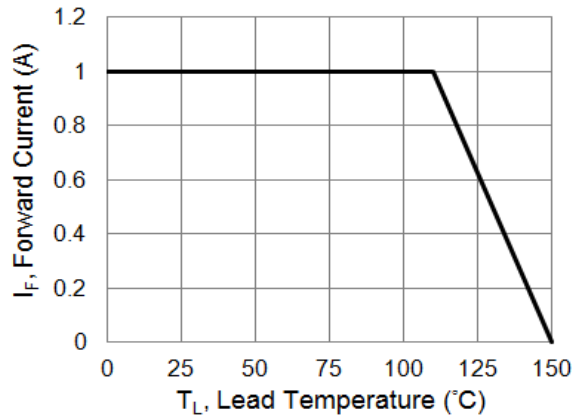


Fig.1 Forward Current Derating Curve

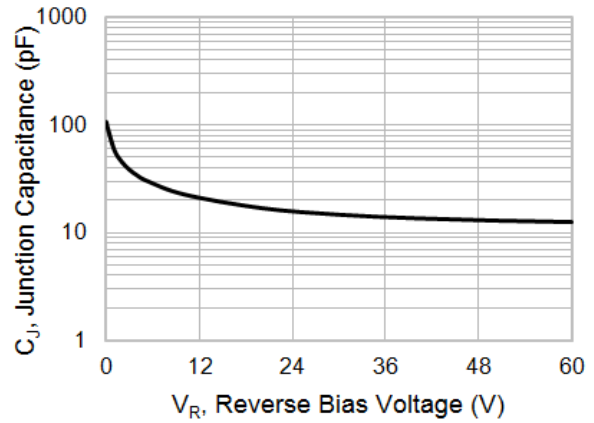


Fig.2 Typical Junction Capacitance

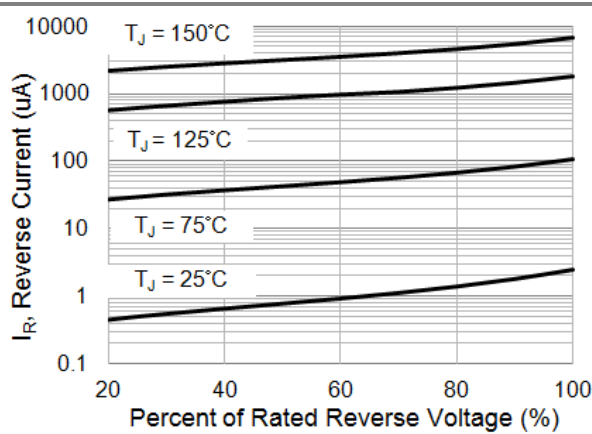


Fig.3 Typical Reverse Characteristics

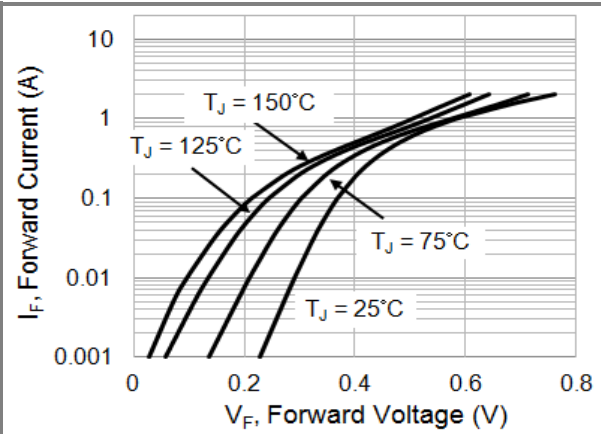


Fig.4 Typical Forward Characteristics

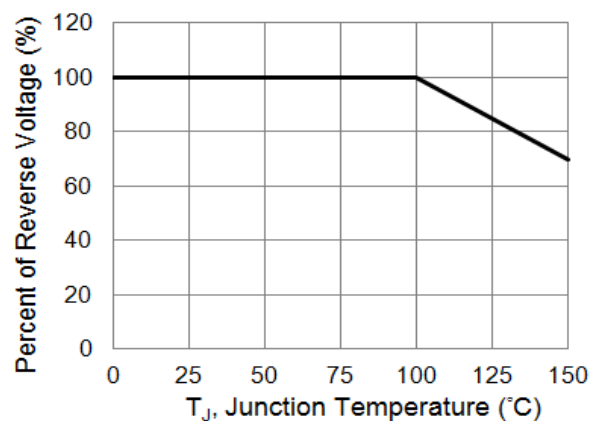


Fig.5 Operating Temperature Derating Curve

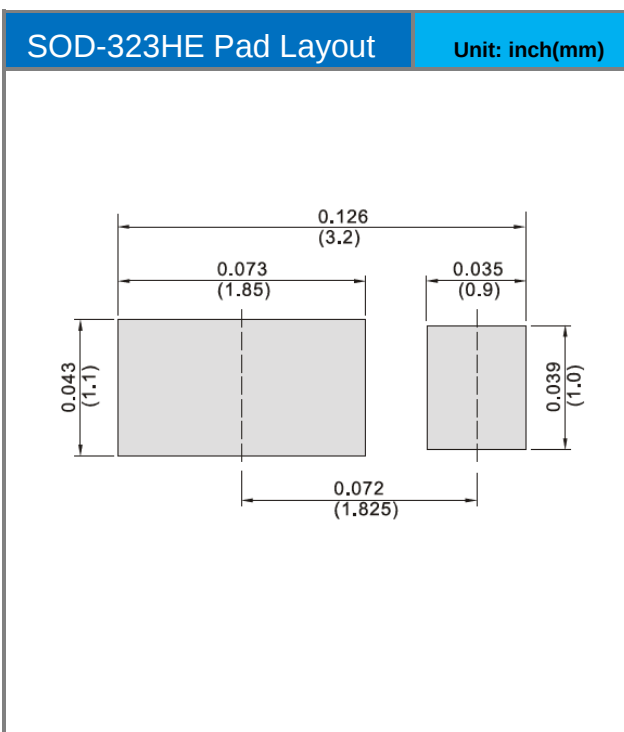
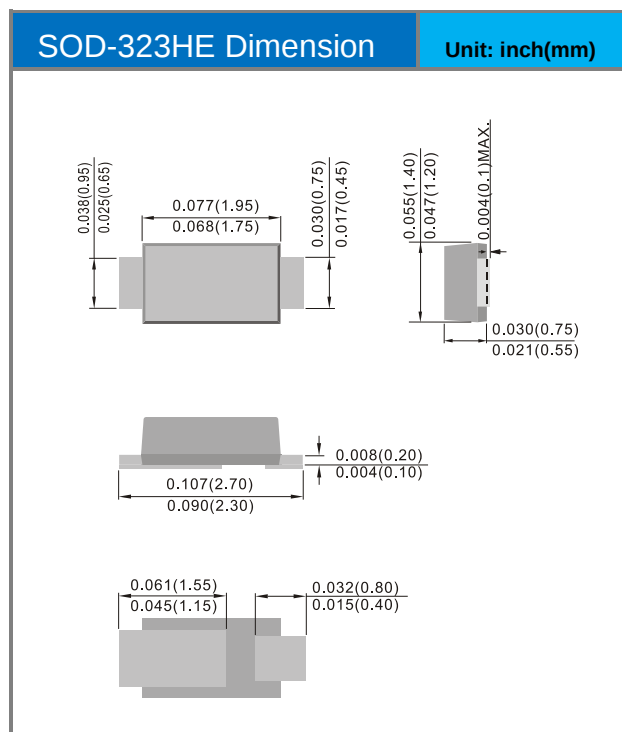


SS1060HEWS-AU

Part No Packing Code Version

Part No Packing Code	Package Type	Packing Type	Marking	Version
SS1060HEWS-AU_R1_000A1	SOD-323HE	5K / 7" Reel	EW	Halogen free

Packaging Information & Mounting Pad Layout





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