

# SS3060HE-AU

## Surface Mount Schottky Barrier Rectifier

**Voltage**

**60 V**

**Current**

**3 A**

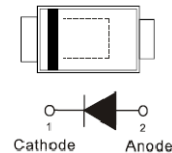
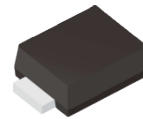
### Features

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O
- For surface mounted applications in order to optimize board space
- Low power loss,high efficiency
- High surge current capability
- Acquire quality system certificate : TS16949
- AEC-Q101 qualified
- Lead free in compliance with EU RoHS 2011/65/EU directive
- Green molding compound as per IEC61249 Std. . (Halogen Free)

### Mechanical Data

- Case: SOD-123HE Package
- Terminals: Solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes cathode end
- Approx. Weight: 0.0006 ounces, 0.0184 grams

### SOD-123HE



### Maximum Ratings and Thermal Characteristics (T<sub>A</sub> = 25 °C unless otherwise noted)

PARAMETER	SYMBOL	LIMIT	UNITS
Maximum Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	60	V
Maximum Rms Voltage	V <sub>RMS</sub>	42	V
Maximum Dc Blocking Voltage	V <sub>DC</sub>	60	V
Maximum Average Forward Current	I <sub>F(AV)</sub>	3	A
Peak Forward Surge Current: 8.3 ms Single Half Sine-Wave Superimposed On Rated Load	I <sub>FSM</sub>	80	A
Typical Junction Capacitance Measured at 1 MHZ And Applied V <sub>R</sub> = 4 V	C <sub>J</sub>	125	pF
Typical Thermal Resistance <sup>(Note 2)</sup>	R <sub>θJA</sub>	105	°C/W
	R <sub>θJC</sub>	20	
	R <sub>θJL</sub>	20	
Operating Junction Temperature Range	T <sub>J</sub>	-55~150	°C
Storage Temperature Range	T <sub>STG</sub>	-55~150	°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 <sup>(Note 1)</sup>	$V_F$	$I_F = 1\text{ A}, T_J = 25^\circ\text{C}$	-	0.43	-	V
		$I_F = 3\text{ A}, T_J = 25^\circ\text{C}$	-	-	0.65	
		$I_F = 1\text{ A}, T_J = 125^\circ\text{C}$	-	0.36	-	
		$I_F = 3\text{ A}, T_J = 125^\circ\text{C}$	-	0.56	-	
Reverse Current <sup>(Note 3)</sup>	$I_R$	$V_R = 48\text{ V}, T_J = 25^\circ\text{C}$	-	9	-	uA
		$V_R = 60\text{ V}, T_J = 25^\circ\text{C}$	-	-	100	
		$V_R = 60\text{ V}, T_J = 125^\circ\text{C}$	-	7	-	mA

#### NOTES:

1. Pulse Test with  $PW = 300\mu\text{sec}$ , 1% Duty Cycle.
2. Mounted on  $50\text{cm}^2$  FR-4 PCB Board.
3. Short duration pulse test used to minimize self-heating effect.

## SS3060HE-AU

### RATING AND CHARACTERISTIC CURVES

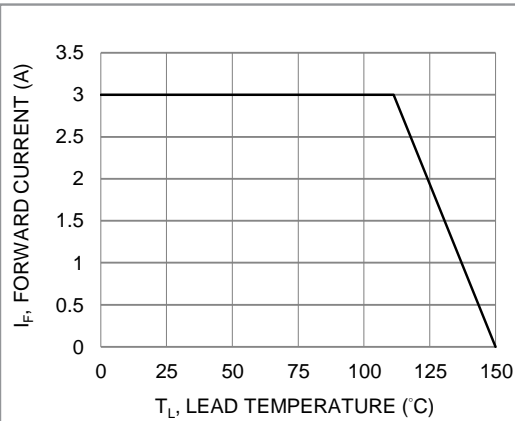


Fig.1- FORWARD CURRENT DERATING CURVE

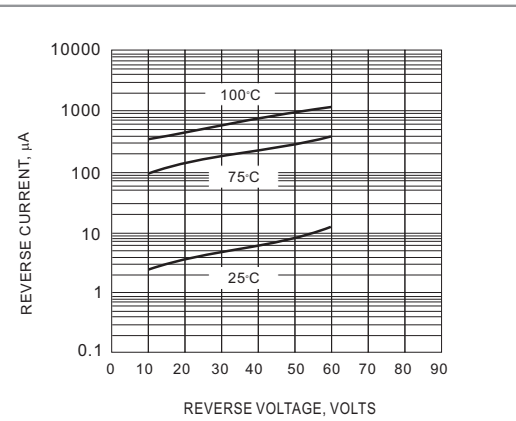


Fig.2- TYPICAL REVERSE CHARACTERISTICS

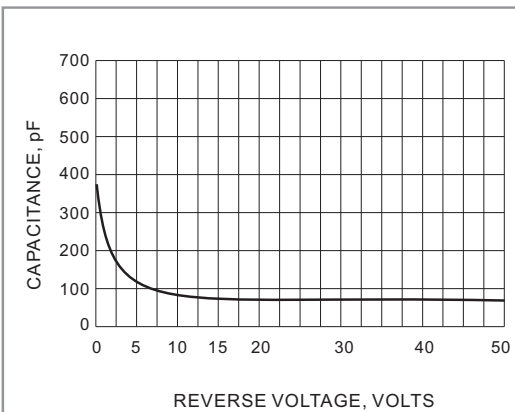


Fig.3- TYPICAL JUNCTION CAPACITANCE

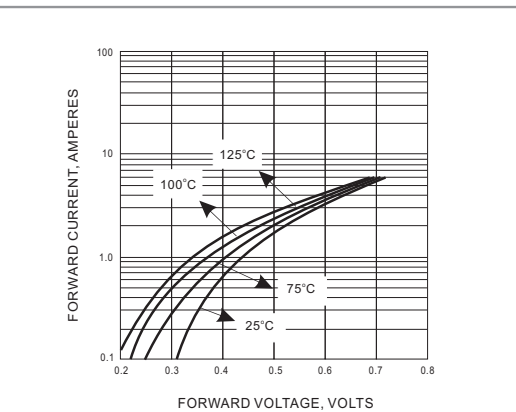


Fig.4- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

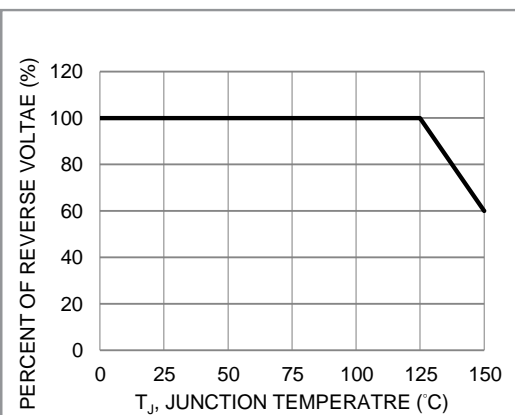


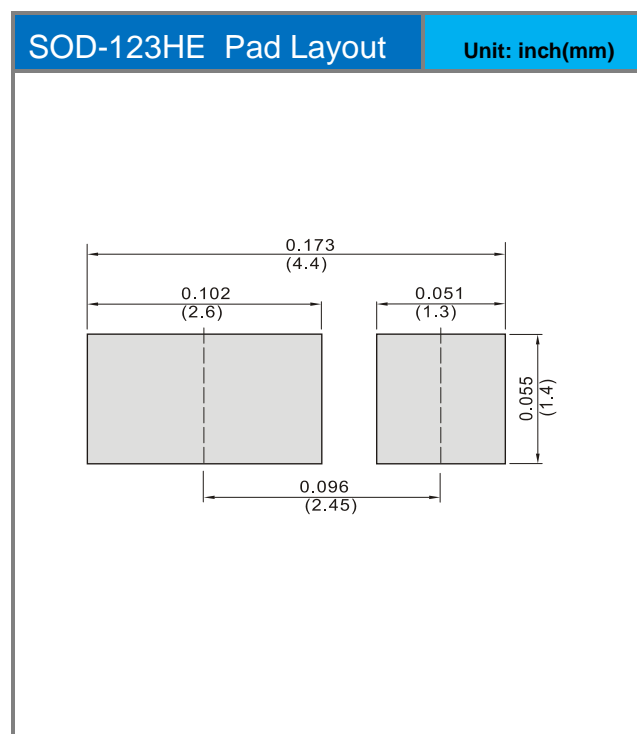
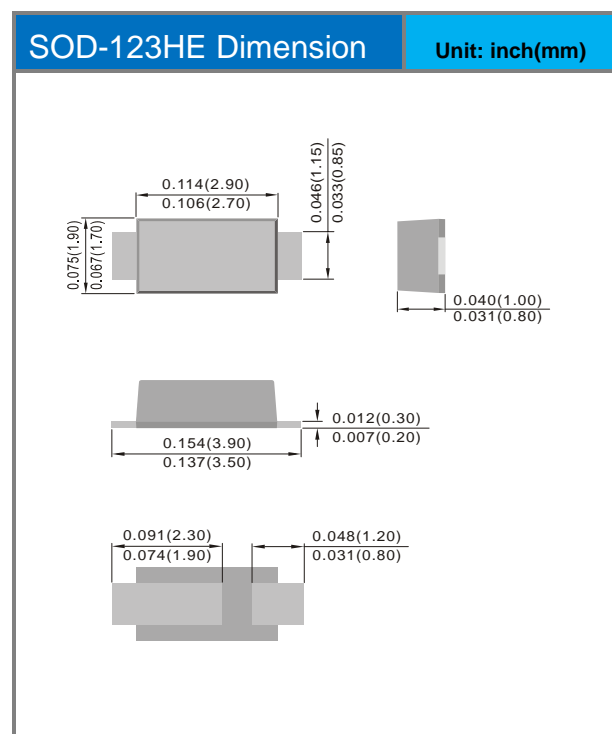
Fig.5- OPERATING TEMPERATURE DERATING CURVE

## SS3060HE-AU

### Part No. Packing Code Version

Part No. Packing Code	Package Type	Packing Type	Marking	Version
SS3060HE-AU_R1_000A1	SOD-123HE	3K / 7" Reel	ED	Halogen free

### Packaging Information & Mounting Pad Layout





## SS3060HE-AU

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