

SS3060HE-AU

Surface Mount Schottky Barrier Rectifier

Voltage

60 V

Current

3 A

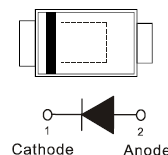
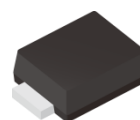
Features

- 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_A = 25 °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)}	3	A
Peak Forward Surge Current: 8.3 ms Single Half Sine-Wave Superimposed On Rated Load	I _{FSM}	80	A
Typical Junction Capacitance Measured at 1 MHZ And Applied V _R = 4 V	C _J	125	pF
Typical Thermal Resistance ^(Note 2)	R _{θJA}	105	°C/W
	R _{θJC}	20	
	R _{θJL}	20	
Operating Junction Temperature Range	T _J	-55~150	°C
Storage Temperature Range	T _{STG}	-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 ^(Note 1)	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 ^(Note 3)	I_R	$V_R = 48\text{ V}, T_J = 25^\circ\text{C}$	-	9	-	μA
		$V_R = 60\text{ V}, T_J = 25^\circ\text{C}$	-	-	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 50cm^2 FR-4 PCB Board.
3. Short duration pulse test used to minimize self-heating effect.

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RATING AND CHARACTERISTIC CURVES

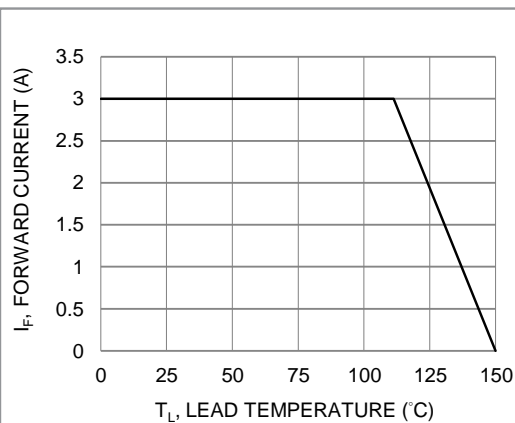


Fig.1- FORWARD CURRENT DERATING CURVE

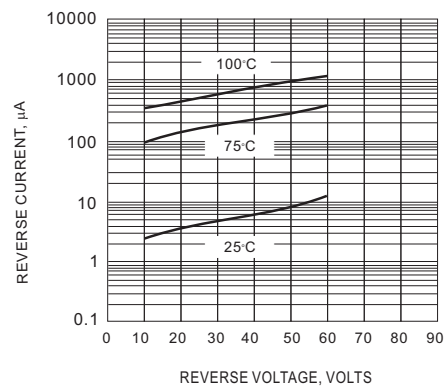


Fig.2- TYPICAL REVERSE CHARACTERISTICS

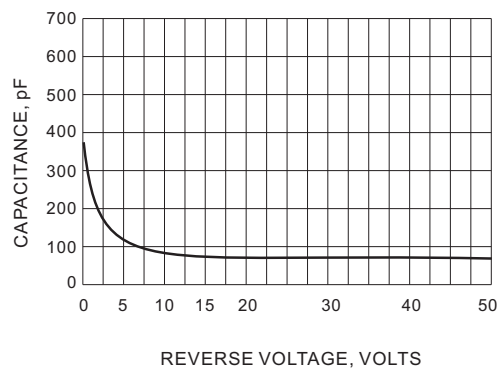


Fig.3- TYPICAL JUNCTION CAPACITANCE

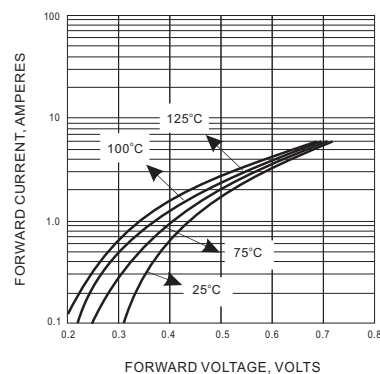


Fig.4- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

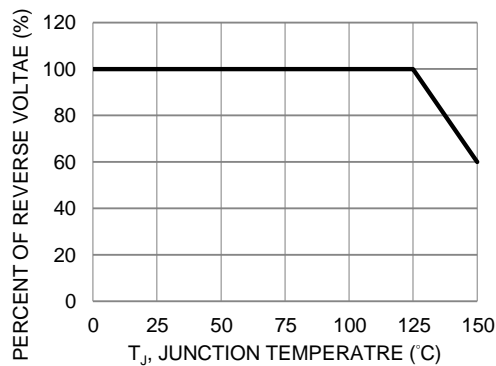


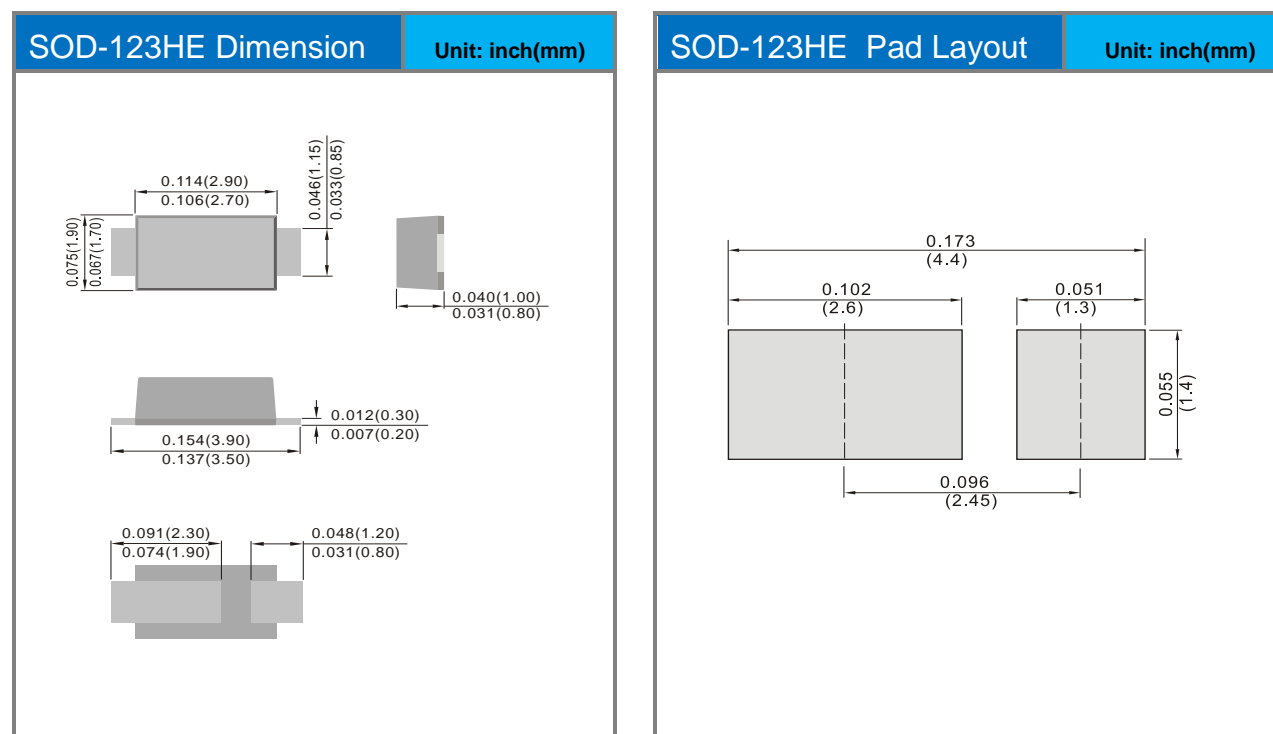
Fig.5- OPERATING TEMPERATURE DERATING CURVE

SS3060HE-AU

Product and Packing Information

Part No.	Package Type	Packing Type	Marking
SS3060HE-AU	SOD-123HE	3K / 7" Reel	ED

Packaging Information & Mounting Pad Layout



SS3060HE-AU

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