

# BAS70WS-AU

## SURFACE MOUNT SCHOTTKY DIODES

**Voltage**

**70 V**

**Current**

**0.2 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-323 Package
- Terminals: Solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes cathode end
- Approx. Weight: 0.00014 ounces, 0.0041 grams

### SOD-323



## 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>	70	V
Maximum Rms Voltage	V <sub>RMS</sub>	49	V
Maximum Dc Blocking Voltage	V <sub>DC</sub>	70	V
Maximum Average Forward Current	I <sub>F(AV)</sub>	0.2	A
Peak Forward Surge Current: 1 s Single Half Sine-Wave Superimposed On Rated Load	I <sub>FSM</sub>	0.6	A
Typical Junction Capacitance Measured at 1 MHZ And Applied V <sub>R</sub> = 0 V	C <sub>J</sub>	2	pF
Typical Thermal Resistance	R <sub>θJA</sub> <sup>(1)</sup>	650	°C/W
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	$V_F$	$I_F = 1\text{ mA}, T_J = 25^\circ\text{C}$	-	-	0.41	V
		$I_F = 10\text{ mA}, T_J = 25^\circ\text{C}$	-	-	0.75	
		$I_F = 15\text{ mA}, T_J = 25^\circ\text{C}$	-	-	0.9	
		$I_F = 1\text{ mA}, T_J = 125^\circ\text{C}$	-	0.25	-	
		$I_F = 10\text{ mA}, T_J = 125^\circ\text{C}$	-	0.55	-	
		$I_F = 15\text{ mA}, T_J = 125^\circ\text{C}$	-	0.59	-	
Reverse Current	$I_R^{(2)}$	$V_R = 50\text{ V}, T_J = 25^\circ\text{C}$	-	-	0.1	$\mu\text{A}$
		$V_R = 70\text{ V}, T_J = 25^\circ\text{C}$	-	-	1	
		$V_R = 70\text{ V}, T_J = 125^\circ\text{C}$	-	45	-	

### NOTES:

1. Mounted on a FR4 PCB, single-sided copper, mini pad.
2. Short duration pulse test used to minimize self-heating effect

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## TYPICAL CHARACTERISTIC CURVES

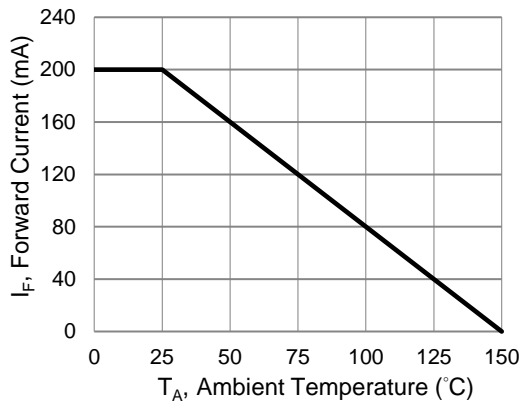


Fig.1 Forward Current Derating Curve

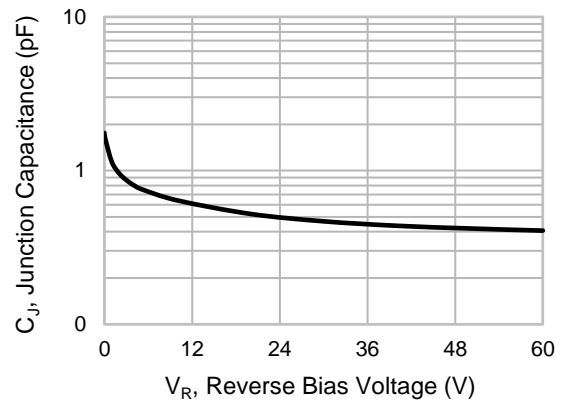


Fig.2 Typical Junction Capacitance

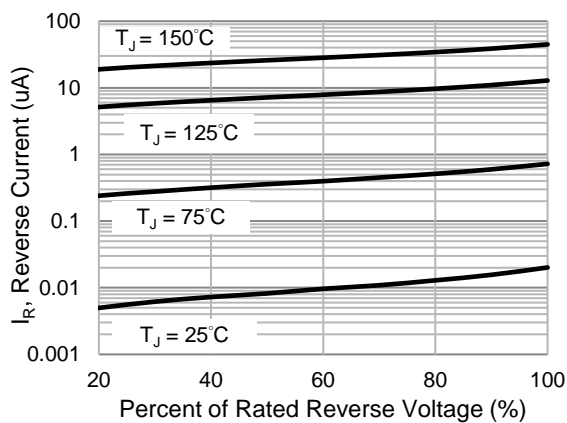


Fig.3 Typical Reverse Characteristics

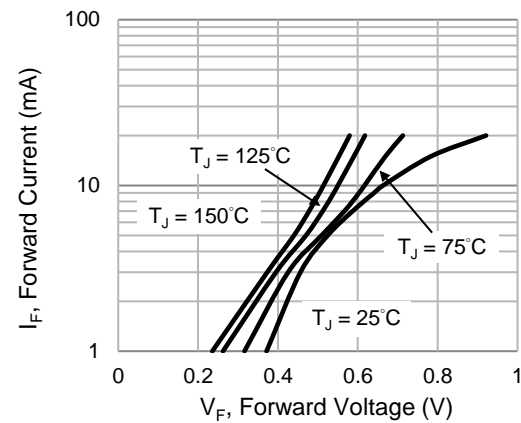


Fig.4 Typical Forward Characteristics

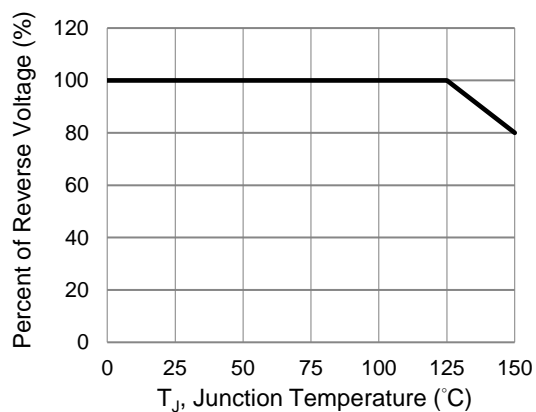


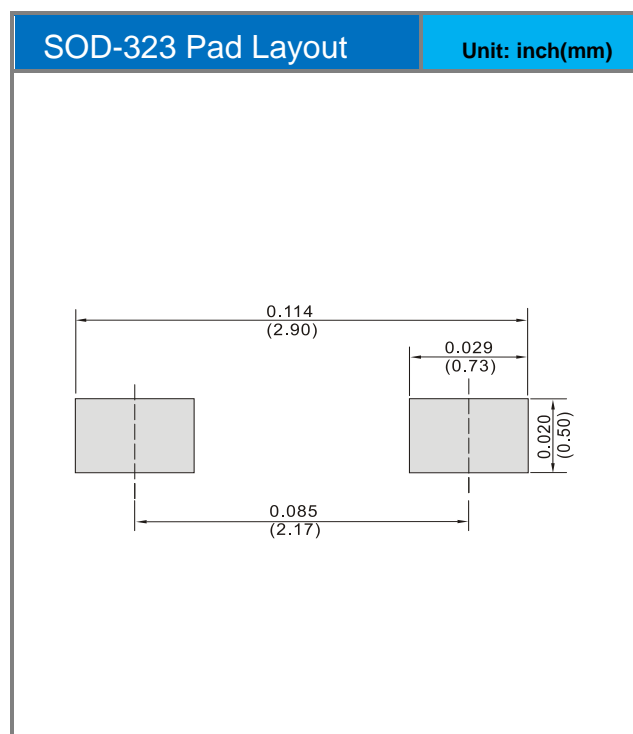
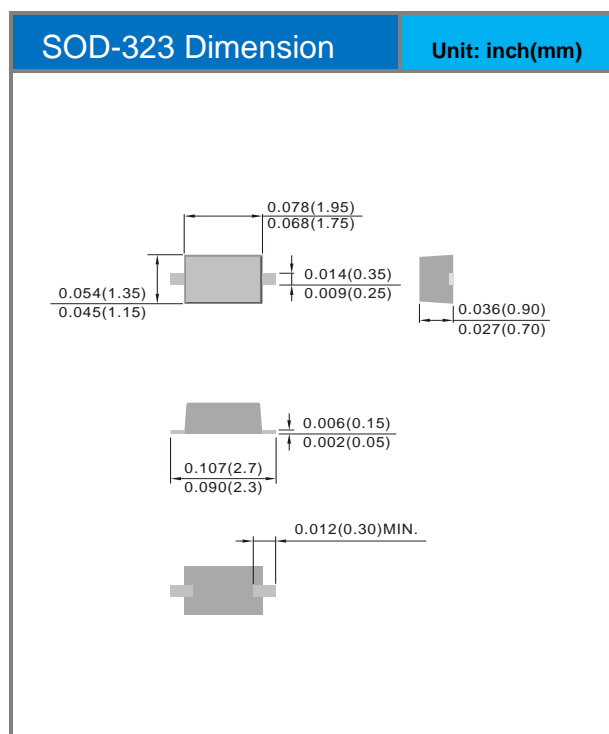
Fig.5 Operating Temperature Derating Curve

# BAS70WS-AU

## Product and Packing Information

Part No.	Package Type	Packing Type	Marking
BAS70WS-AU	SOD-323	5K pcs / 7" reel	A70

## Packaging Information & Mounting Pad Layout



## **BAS70WS-AU**

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