

BAS70W-AU~BAS70SW-AU

SURFACE MOUNT SCHOTTKY DIODES

Voltage

70 V

Current

0.2 A

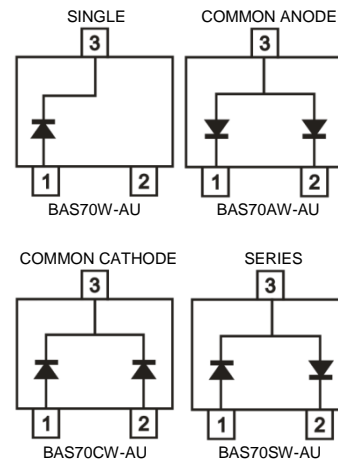
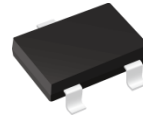
Features

- Fast switching speed
- Surface mount package ideally suited for automatic insertion electrical identical standard JEDEC
- High conductor
- Lead free in compliance with EU RoHS 2.0
- Green molding compound as per IEC 61249 standard
- AEC-Q101 qualified

Mechanical Data

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

SOT-323



Maximum Ratings and Thermal Characteristics (T_A = 25°C unless otherwise noted)

PARAMETER	SYMBOL	LIMIT	UNITS
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	70	V
Maximum Rms Voltage	V _{RMS}	49	V
Maximum Dc Blocking Voltage	V _{DC}	70	V
Maximum Average Forward Current	I _{F(AV)}	0.2	A
Peak Forward Surge Current : 1 s Single Half Sine-Wave Superimposed On Rated Load	I _{FSM}	0.6	A
Typical Junction Capacitance Measured at 1 MHz And Applied V _R = 0 V	C _J	2	pF
Typical Thermal Resistance	R _{θJA} ⁽¹⁾	556	°C/W
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	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	
		$I_F = 1 \text{ mA}, T_J = 125^\circ\text{C}$	-	0.26	-	
		$I_F = 10 \text{ mA}, T_J = 125^\circ\text{C}$	-	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	uA
		$V_R = 70 \text{ V}, T_J = 25^\circ\text{C}$	-	-	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

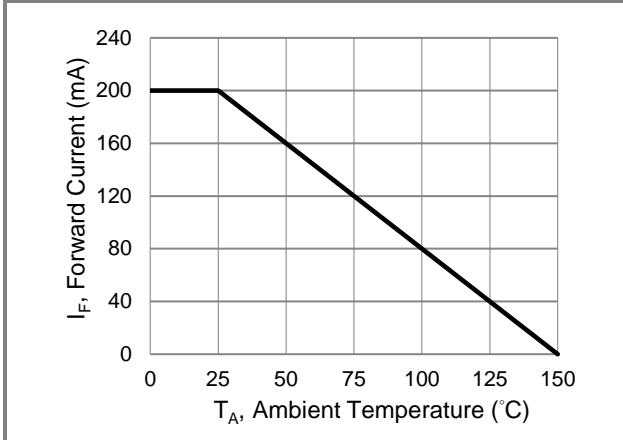


Fig.1 Forward Current Derating Curve

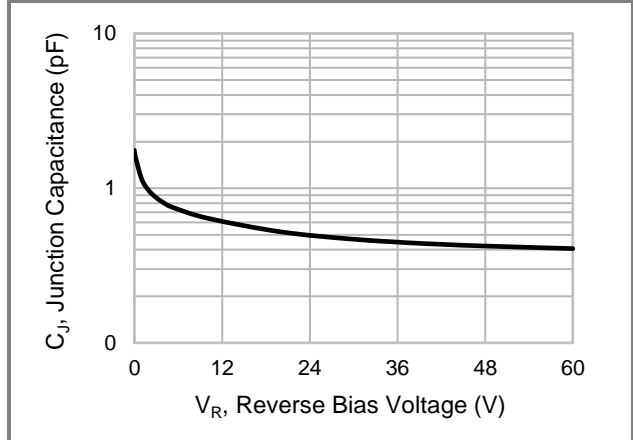


Fig.2 Typical Junction Capacitance

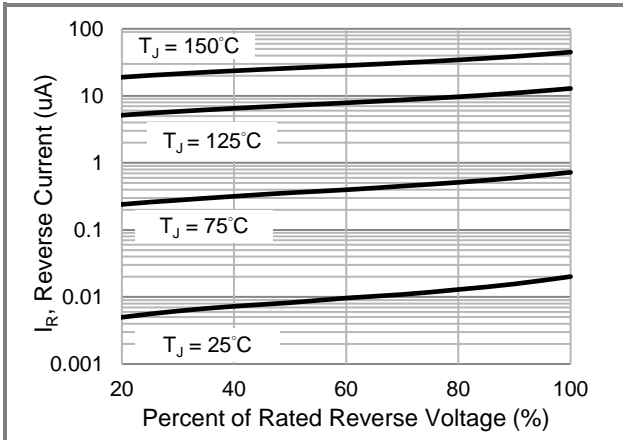


Fig.3 Typical Reverse Characteristics

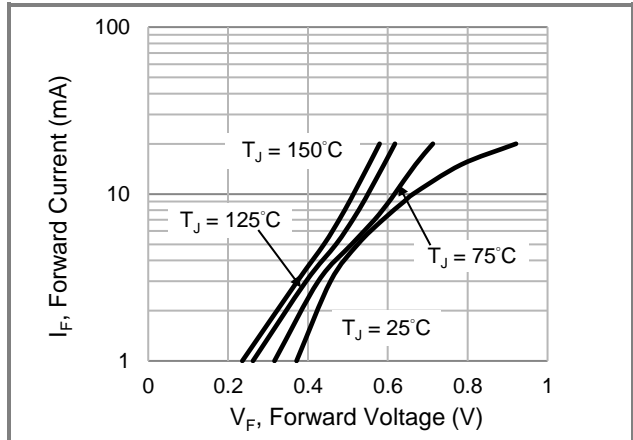


Fig.4 Typical Forward Characteristics

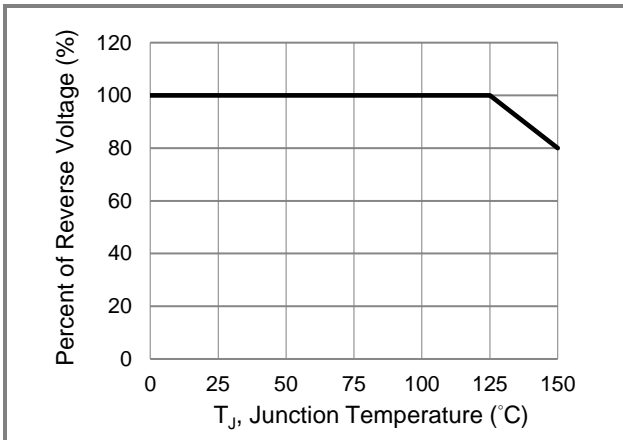


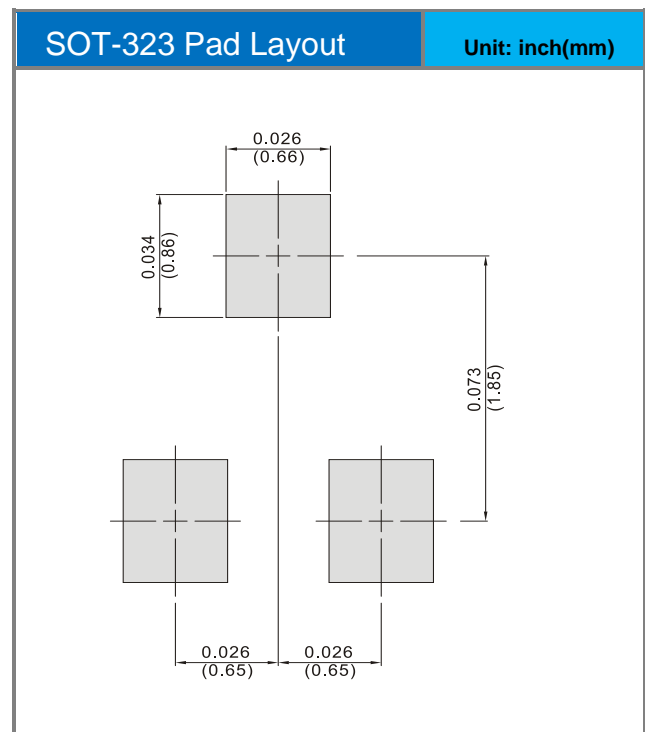
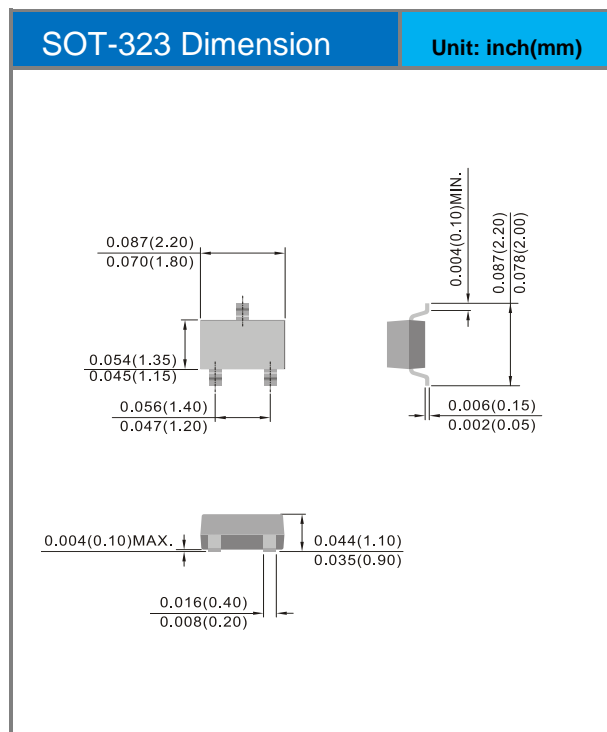
Fig.5 Operating Temperature Derating Curve

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Product and Packing Information

Part No.	Package Type	Packing Type	Marking
BAS70W-AU	SOT-323	3K / 7" Reel	A70
BAS70AW-AU	SOT-323	3K / 7" Reel	A72
BAS70CW-AU	SOT-323	3K / 7" Reel	A73
BAS70SW-AU	SOT-323	3K / 7" Reel	A74

Packaging Information & Mounting Pad Layout



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