

# BAS70WS-AH

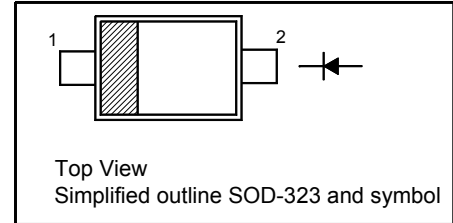
## Small Signal Schottky Barrier Diode

### Features

- AEC-Q101 Qualified
- Low forward voltage drop
- Halogen and Antimony Free(HAF),  
RoHS compliant

### PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



### Absolute Maximum Ratings ( $T_a = 25^\circ\text{C}$ )

Parameter	Symbol	Value	Unit
Repetitive Peak Reverse Voltage	$V_{RRM}$	70	V
Average Rectified Forward Current	$I_{F(AV)}$	70	mA
Surge Non-Repetitive Forward Current ( $t_p = 10\text{ ms}$ )	$I_{FSM}$	1	A
Total Power Dissipation	$P_{tot}$	230	mW
Junction Temperature	$T_J$	150	$^\circ\text{C}$
Storage Temperature Range	$T_{stg}$	- 65 to + 150	$^\circ\text{C}$

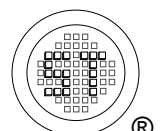
### Thermal Characteristics

Parameter	Symbol	Value	Unit
Typical Thermal Resistance from Junction to Ambient <sup>1)</sup>	$R_{\theta JA}$	550	$^\circ\text{C/W}$

<sup>1)</sup> Device mounted on FR-4 substrate PC board, 2oz copper, with minimum recommended pad layout.

### Characteristics at $T_a = 25^\circ\text{C}$

Parameter	Symbol	Min.	Max.	Unit
Reverse Breakdown Voltage at $I_R = 10\ \mu\text{A}$	$V_{(BR)R}$	70	-	V
Forward Voltage at $I_F = 1\ \text{mA}$	$V_F$	-	410	mV
Reverse Current at $V_R = 50\ \text{V}$	$I_R$	-	100	nA
Diode Capacitance at $V_R = 0\ \text{V}$ , $f = 1\ \text{MHz}$	$C_{tot}$	-	2	pF



## Electrical Characteristic Curves

Fig 1. Reverse Characteristic Curve

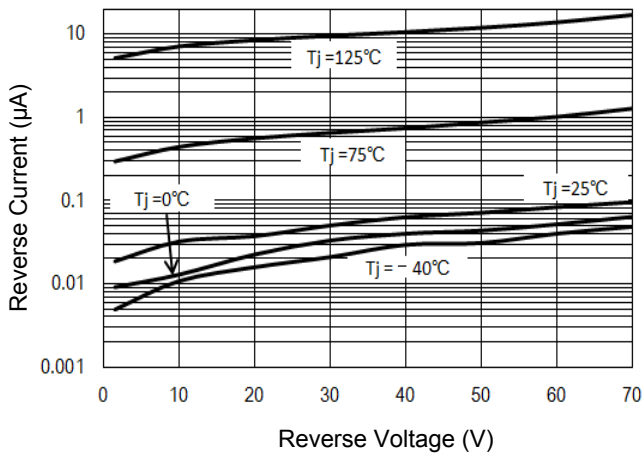


Fig 2. Forward Characteristic Curve

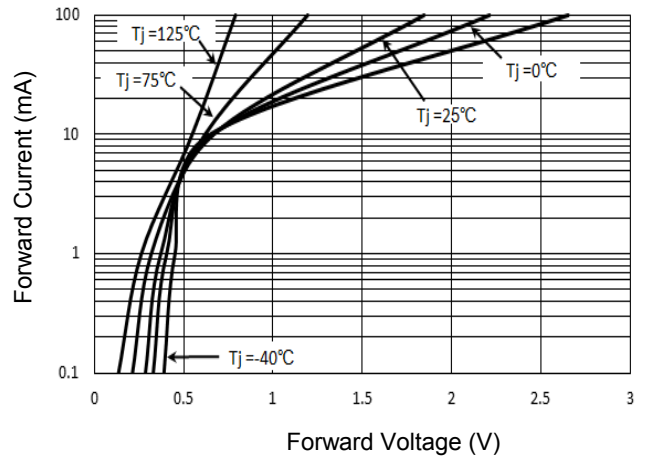


Fig 3. Junction Capacitance

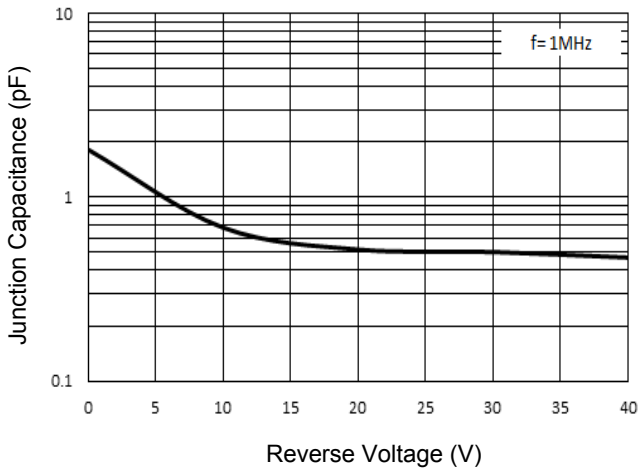
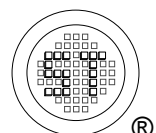
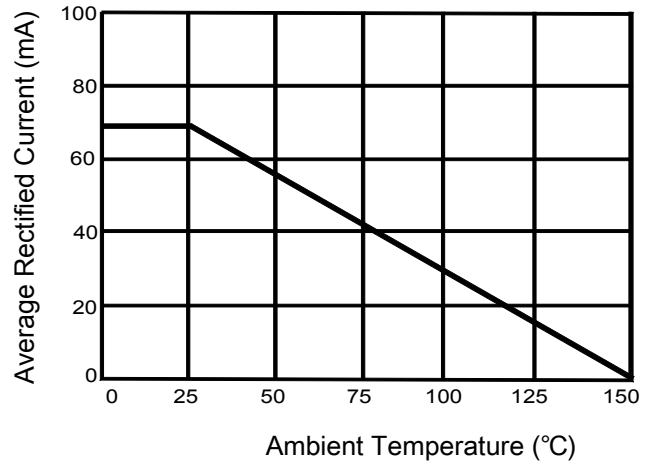


Fig 4. Average Rectified Current Derating Curve

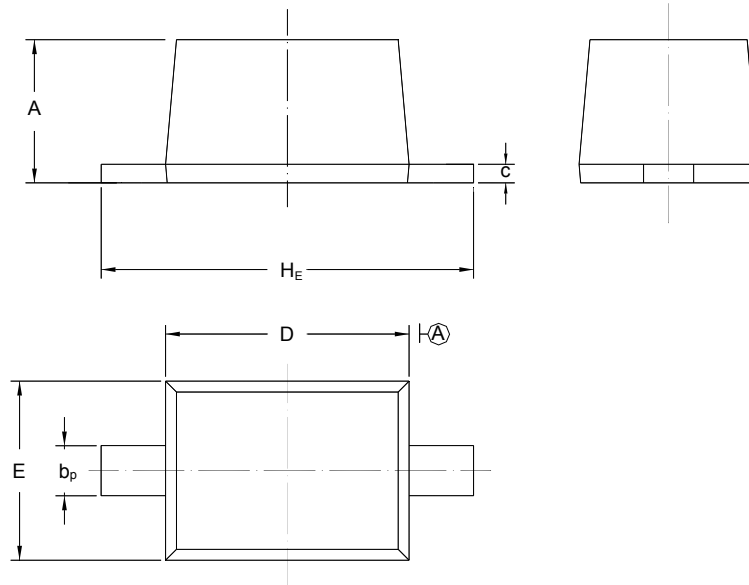


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## PACKAGE OUTLINE

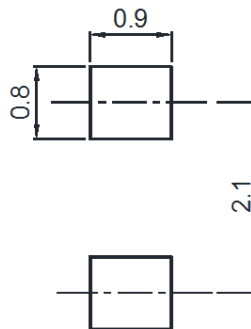
Plastic surface mounted package; 2 leads

SOD-323



UNIT	A	b <sub>p</sub>	C	D	E	H <sub>E</sub>
mm	1.10 0.80	0.40 0.25	0.15 0.10	1.80 1.60	1.35 1.15	2.80 2.30

## Recommended Soldering Footprint



## Packing information

Package	Tape Width (mm)	Pitch		Reel Size		Per Reel Packing Quantity
		mm	inch	mm	inch	
SOD-323	8	4 ± 0.1	0.157 ± 0.004	178	7	3,000

## Marking information

" SX " = Part No.  
 " III " = Cathode line  
 " • " = HAF (Halogen and Antimony Free)  
 Font type: Arial

