

Surface Mount Schottky Diodes

BAS70 Series

70 V

0.2A

SOT-23

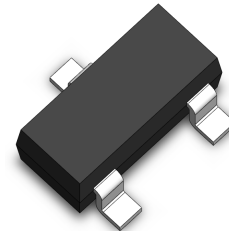
Features

- Fast switching speed.
- Surface mount package ideally suited for automatic insertion.
- Electrically Identical to Standard JEDEC.
- Lead free in compliance with EU RoHS 2011/65/EU directive.
- Green molding compound as per IEC61249 Std. (Halogen Free)

Mechanical Data

- Case: SOT-23, Plastic.
- Terminals: Solderable per MIL-STD-750, Method 2026.
- Approx. Weight: 0.0003 ounces, 0.008 grams.

SOT-23



Absolute Ratings

Parameter	Symbol	Value	Units
Reverse Voltage	V_R	70	V
Peak Reverse Voltage	V_{RRM}	70	V
Average Rectified Current at Temp=25°C	$I_{F(AV)}$	0.2	A
Non-repetitive Peak Forward Surge Current at t=1.0s	I_{FSM}	0.6	A

Thermal Characteristics

Parameter	Symbol	BAS70	BAS70A	BAS70C	BAS70S	Units
Power Dissipation	P_D	225				mW
Thermal Resistance , Junction to Ambient (Note 1)	$R_{\theta JA}$	556				°C/W
Operating Junction Temperature	T_J	-55 to +150				°C
Operating Storage Temperature	T_{STG}	-55 to +150				°C
Circuit Configuration	--	SINGLE	COMMON ANODE	COMMON CATHODE	SERIES	--

Note : 1.Mounted on min pad conditions using FR-4 PCB.

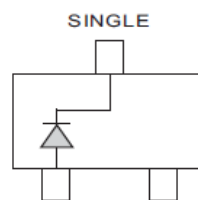


FIG.14

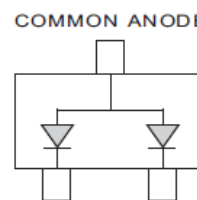


FIG.15

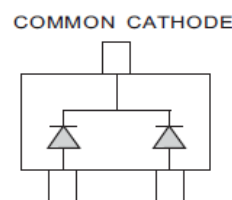


FIG.16

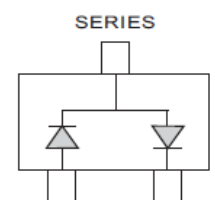


FIG.17

Surface Mount Schottky Diodes

BAS70 Series **70 V** **0.2A** **SOT-23**

Electrical Characteristics

Parameter	Symbol	Test Condition	Min.	Typ.	Max.	Units
Reverse Breakdown Voltage	V_{BR}	$I_R = 10\mu A$	70	--	--	V
Reverse Current	I_R	$V_R = 70V$	--	--	1.0	μA
		$V_R = 50V$	--	--	0.1	
Forward Voltage	V_F	$I_F = 1.0mA$	--	--	0.41	V
		$I_F = 10mA$	--	--	0.75	
		$I_F = 15mA$	--	--	1.00	
Maximum Junction Capacitance	C_J	$V_R = 0V, f = 1.0MHz$	--	--	3.0	pF

Rating and Characteristic Curves

Fig1. Typical Forward Characteristics

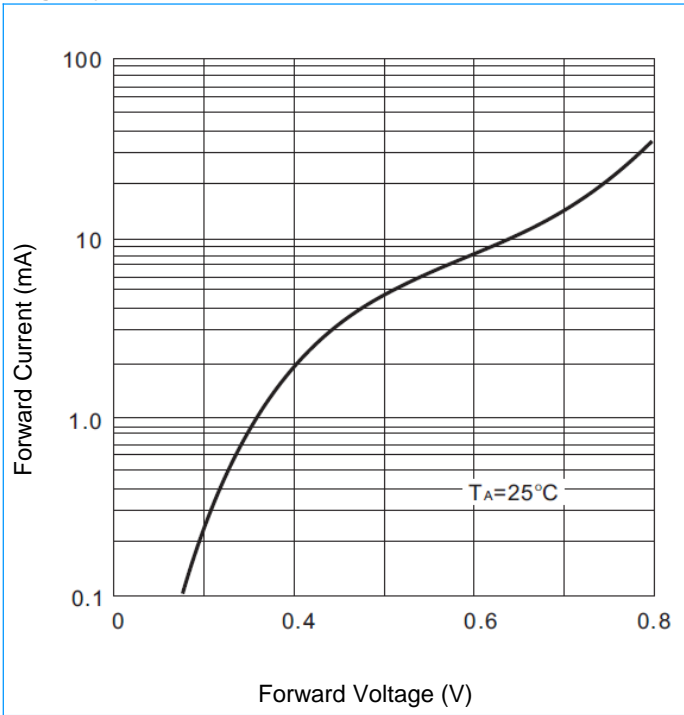
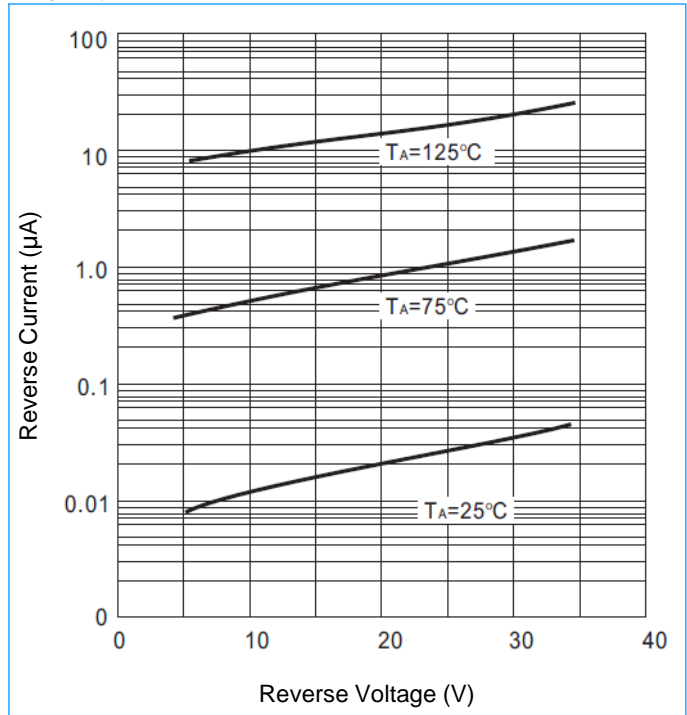


Fig2. Typical Reverse Characteristics



Surface Mount Schottky Diodes

BAS70 Series

70 V

0.2A

SOT-23

Rating and Characteristic Curves (Continue)

Fig3. Typical Junction Capacitance

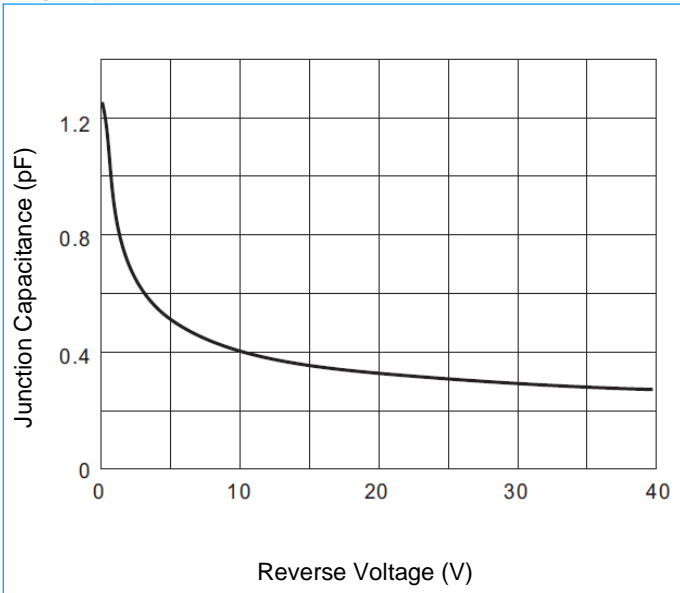


Fig4. Forward Current Derating Curve

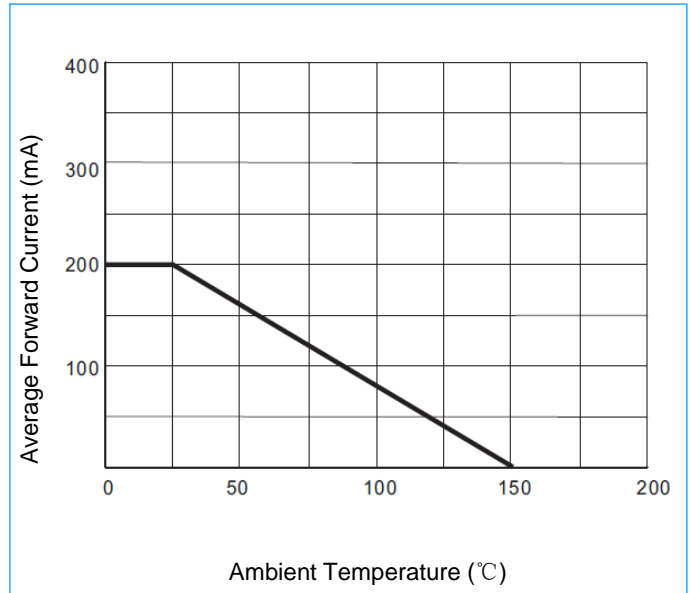
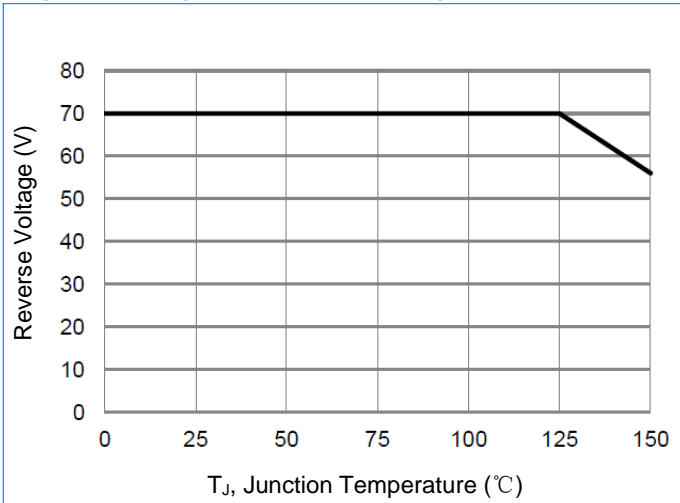


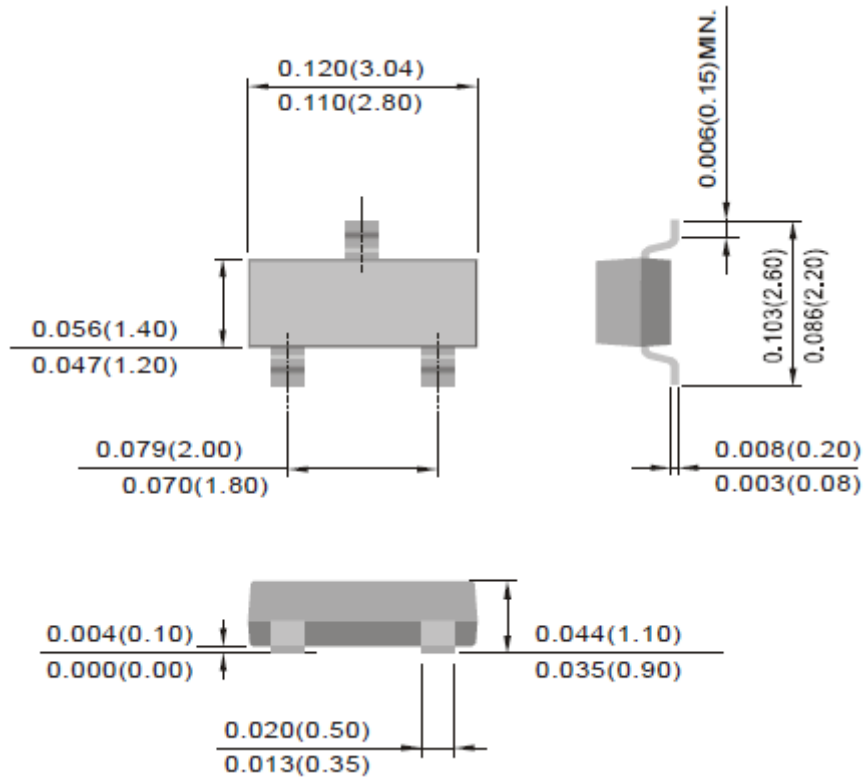
Fig5. Operating Temperature Derating Curve



Surface Mount Schottky Diodes

BAS70 Series
70 V
0.2A
SOT-23

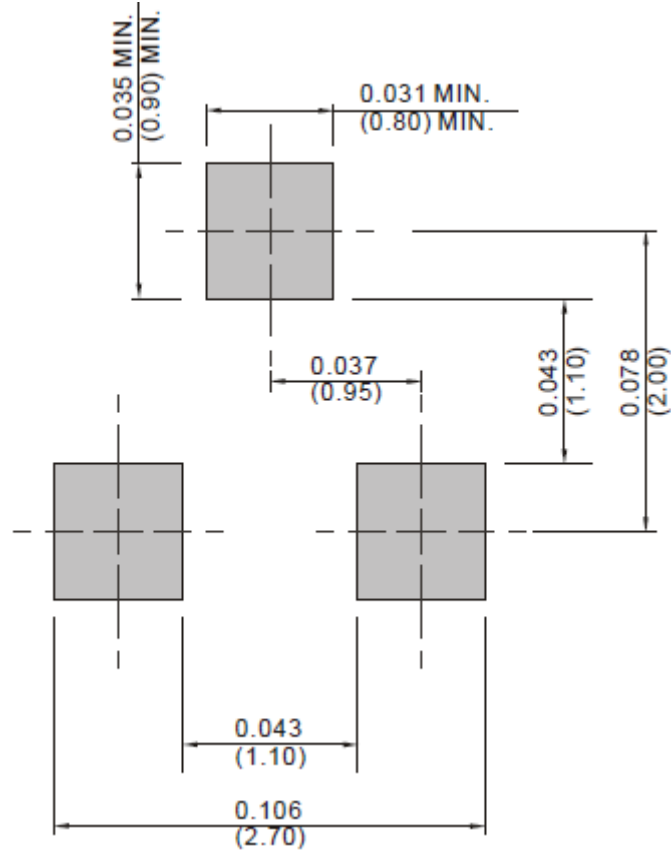
SOT-23 Package Outline (Unit: inch(mm))



Surface Mount Schottky Diodes

BAS70 Series
70 V
0.2A
SOT-23

SOT-23 Mounting Pad Layout (Unit: inch(mm))



Packaging Information

Part Number	Component Package	Quantity	Packaging Option
BAS70 Series	SOT-23	12000 PCS	per 13" plastic Reel
		3000 PCS	per 7" plastic Reel