



### SURFACE MOUNT SCHOTTKY DIODES

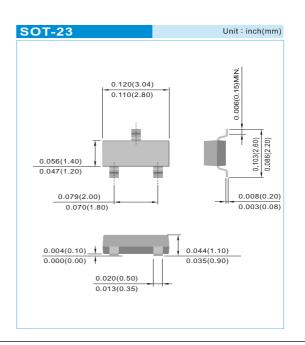
VOLTAGE 70 Volt CURRENT 0.2 Ampere

#### **FEATURES**

- Fast switching speed
- Surface mount package ideally suited for automatic insertion
   Electrical identical standard JEDEC
- 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: SOT-23, Plastic
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 0.0003 ounces, 0.008 grams



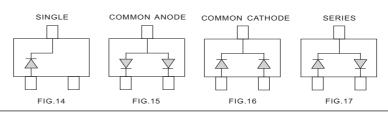
#### **ABSOLUTE RATINGS**

Parameter	Symbol	Value	Units
Reverse Voltage	VR	70	V
Peak Reverse Voltage	Vrrm	70	V
Average Rectified Current at Temp=25°C	I F(AV)	0.2	Α
Non-repetitive Peak Forward Surge Current at t=1.0 s	IFSM	0.6	Α

#### THERMAL CHARACTERISTICS

Parameter	Symbol	BAS70-AU BAS70A-AU		BAS70C-AU	BAS70S-AU	Units
Marking code	-	A70	A72	A73	A74	-
Power Dissipation	PD	225				mW
Thermal Resistance , Junction to Ambient (Note 1)	RθJA	556				
Operating Junction Temperature	TJ	-55 to 150				
Operating Storage Temperature	Тѕтѕ	-55 to 150				°C
Circuit Configuration	-	SINGLE	COMMON ANODE	COMMON CATHODE	SERIES	-

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







### **ELECTRICAL CHARACTERISTICS**

Parameter	Symbol	Test Condition	Min.	Тур.	Max.	Units
Reverse Breakdown Voltage	V(BR)	I R=10 uA	70		1	V
Reverse Current	IR	V <sub>R</sub> =70 V V <sub>R</sub> =50 V			1.0 0.1	μА
Forward Voltage	VF	F=1.0mA   F=10mA   F=15mA	-1-		0.41 0.75 1.00	V
Maximum Junction Capacitance	Cı	VR=0V, f=1.0MHz			2.0	pF





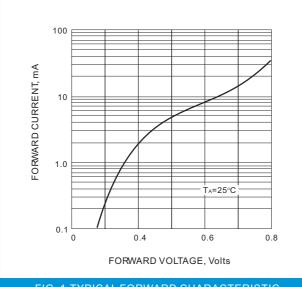


FIG. 1 TYPICAL FORWARD CHARACTERISTIC

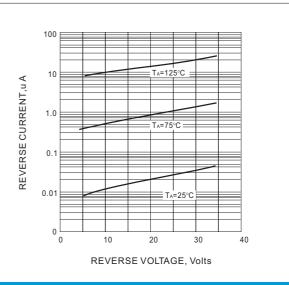


FIG. 2 TYPICAL REVERSE CHARACTERISTICS

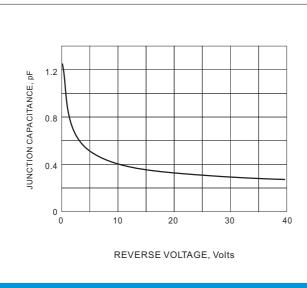


FIG. 3 TYPICAL JUNCTION CAPACITANCE

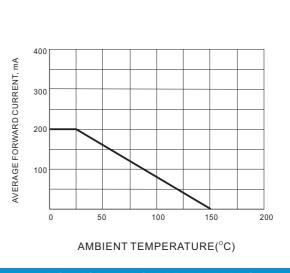
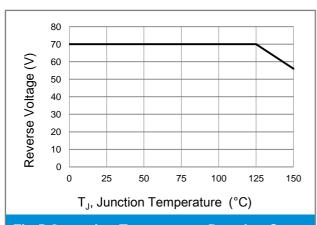


FIG. 4 FORWARD CURRENT DERATING

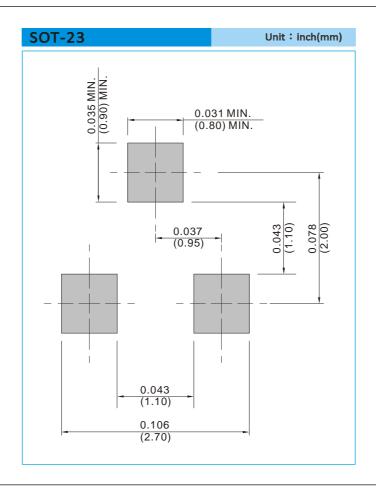


**Fig.5 Operating Temperature Derating Curve** 





### **MOUNTING PAD LAYOUT**



#### **ORDER INFORMATION**

• Packing information

T/R - 12K per 13" plastic Reel

T/R - 3K per 7" plastic Reel





## Part No\_packing code\_Version

BAS70-AU\_R1\_000A1 BAS70-AU\_R2\_000A1

## For example:



Packing Code XX				Version Code XXXXX			
Packing type	1 <sup>st</sup> Code	Packing size code	2 <sup>nd</sup> Code	HF or RoHS	1 <sup>st</sup> Code	2 <sup>nd</sup> ~5 <sup>th</sup> Code	
Tape and Ammunition Box (T/B)	Α	N/A	0	HF	0	serial number	
Tape and Reel (T/R)	R	7"	1	RoHS	1	serial number	
Bulk Packing (B/P)	В	13"	2				
Tube Packing (T/P)	Т	26mm	Х				
Tape and Reel (Right Oriented) (TRR)	S	52mm	Y				
Tape and Reel (Left Oriented) (TRL)	L	PANASERT T/B CATHODE UP (PBCU)	U				
FORMING	F	PANASERT T/B CATHODE DOWN (PBCD)	D				





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