



# BAS100ATB6

## SURFACE MOUNT DUAL ISOLATED OPPOSING SILICON SCHOTTKY DIODES

**VOLTAGE** 100 Volt

### FEATURES

- Smallest 100V Dual, isolated Schottky diode currently available
- Lead free in compliance with EU RoHS 2011/65/EU directive
- Green molding compound as per IEC61249 Std. . (Halogen Free)

### MECHANICAL DATA

- Case: SOT-563, Plastic
- Terminals: Solderable per MIL-STD-750, Method 2026
- Apporx. Weight: 0.0001 ounces, 0.0026 grams
- Marking: BW

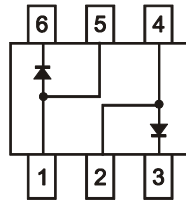
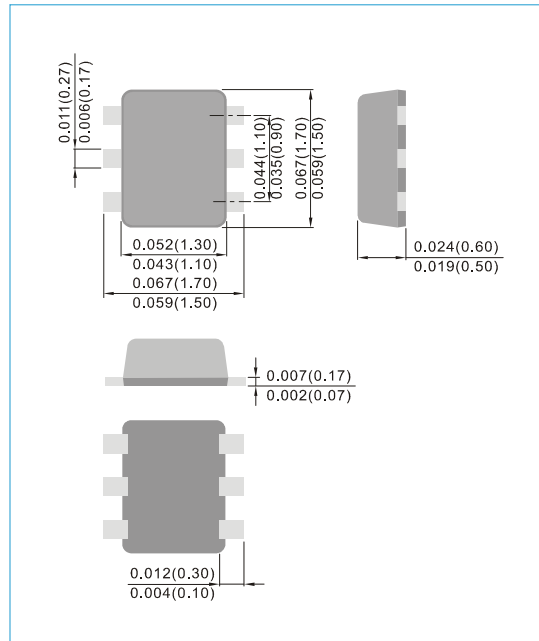


Fig.173(TOP VIEW)

### SOT-563

Unit : inch(mm)



### ABSOLUTE MAXIMUM RATINGS (TA=25°C unless otherwise noted)

PARAMETER	SYMBOL	VALUE	UNITS
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	100	V
Maximum RMS Voltage	$V_{RMS}$	70	V
Maximum DC Blocking Voltage	$V_R$	100	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	0.4	A
Maximum Forward Rectified Current @ t=10s	$I_{F(AV)}$	0.5	A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load	$I_{FSM}$	5.5	A
Peak Forward Surge Current : 10ms single half sine-wave superimposed on rated load	$I_{FSM}$	5	A
Typical Junction Capacitance ( $V_R=4V, f=1MHz$ )	$C_J$	21	pF
Typical Thermal Resistance, Junction to Ambient (Note 1)	$R_{\theta JA}$	480	°C/W
Operating Junction Temperature and Storage Temperature Range	$T_J, T_{STG}$	-55 to +150	°C

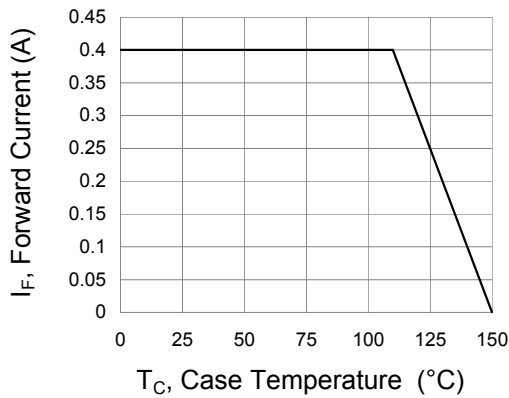
NOTE : 1. Mounted on an FR4 PCB, single-sided copper, mini pad.



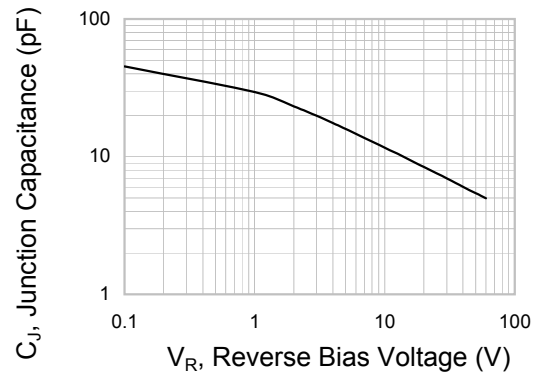
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## ELECTRICAL CHARACTERISTICS (T<sub>A</sub>=25°C unless otherwise noted)

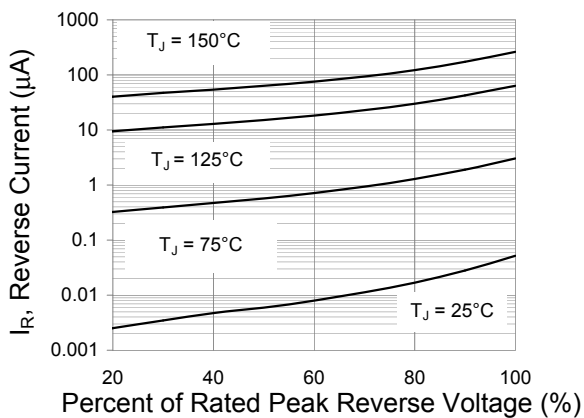
PARAMETER	SYMBOL	Test Condition	MIN.	TYP.	MAX.	UNITS
Breakdown Voltage	V <sub>BR</sub>	I <sub>R</sub> =200μA T <sub>J</sub> =25°C	100	-	-	V
Instantaneous Forward Voltage	V <sub>F</sub>	I <sub>F</sub> =0.4A T <sub>J</sub> =25°C	-	0.76	0.81	V
		I <sub>F</sub> =0.5A T <sub>J</sub> =25°C	-	0.8	0.85	V
		I <sub>F</sub> =0.4A T <sub>J</sub> =125°C	-	0.63	-	V
		I <sub>F</sub> =0.5A T <sub>J</sub> =125°C	-	0.66	-	V
Reverse Current	I <sub>R</sub>	V <sub>R</sub> =80 V T <sub>J</sub> =25°C	-	20	-	nA
		V <sub>R</sub> =100 V T <sub>J</sub> =25°C	-	-	1	μA
		V <sub>R</sub> =100 V T <sub>J</sub> =125°C	-	65	-	μA



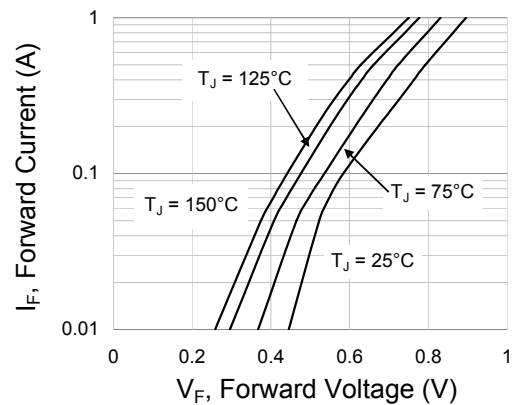
**Fig.1 Forward Current Derating Curve**



**Fig.2 Typical Junction Capacitance**



**Fig.3 Typical Reverse Characteristics**



**Fig.4 Typical Forward Characteristics**

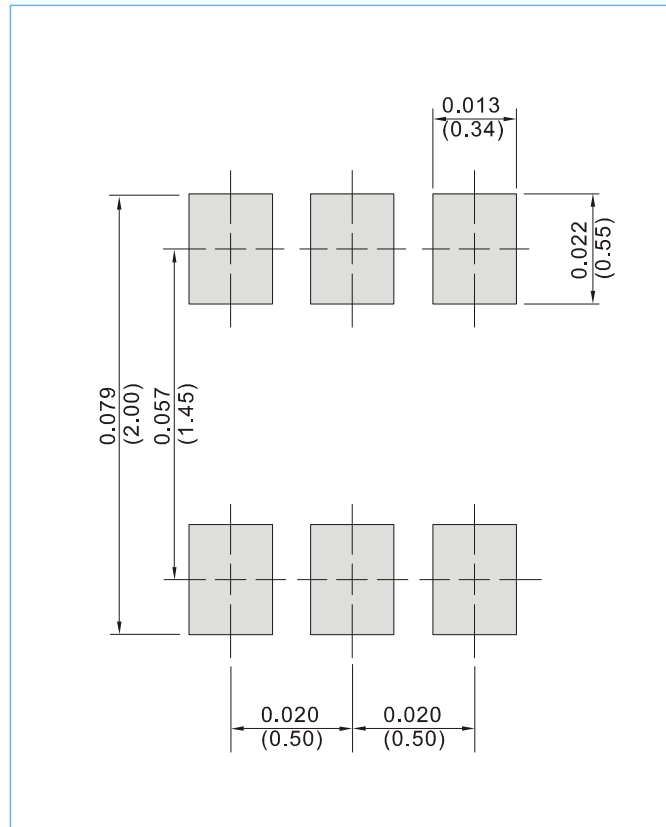


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## MOUNTING PAD LAYOUT

**SOT-563**

Unit : inch(mm)



## ORDER INFORMATION

- Packing information
  - T/R - 4K per 7" plastic Reel
  - T/R - 10K per 13" plastic Reel



# BAS100ATB6

## Part No\_packing code\_Version

BAS100ATB6\_R1\_00001

BAS100ATB6\_R2\_00001

For example :

**RB500V-40\_R2\_00001**



Packing Code <b>XX</b>				Version Code <b>XXXXX</b>		
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)	A	N/A	0	HF	0	serial number
Tape and Reel (T/R)	R	7"	1	RoHS	1	serial number
Bulk Packing (B/P)	B	13"	2			
Tube Packing (T/P)	T	26mm	X			
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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