



#### 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 2.0
- Green molding compound as per IEC 61249 standard

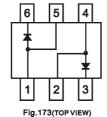
#### **MECHANICAL DATA**

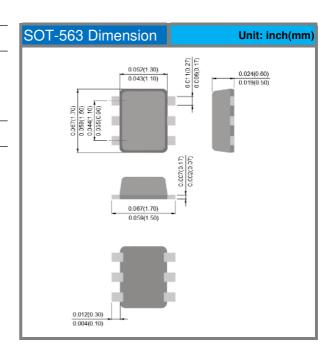
· Case: SOT-563, Plastic

• Terminals : Solderable per MIL-STD-750, Method 2026

· Apporx. Weight: 0.0026 grams

• Marking : BW





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

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

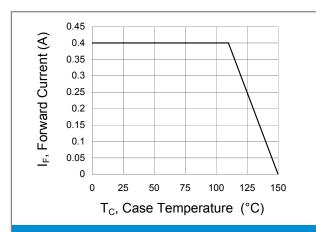
NOTE: 1. Mounted on an FR4 PCB, single-sided copper, mini pad.



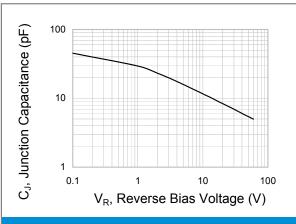


### ELECTRICAL CHARACTERISTICS (Ta=25°C unless otherwise noted)

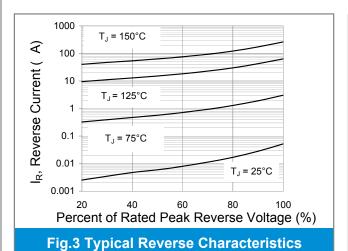
PARAMETER	SYMBOL	Test Condition		MIN.	TYP.	MAX.	UNITS
Breakdown Voltage	VBR	I R=200μA	TJ=25°C	100	-	-	V
Instantaneous Forward Voltage	VF	I F=0.4A I F=0.5A	TJ=25°C TJ=25°C		0.76 0.8	0.81 0.85	V
		I F=0.4A I F=0.5A	TJ=125°C TJ=125°C	-	0.63 0.66	-	V
Reverse Current	IR	VR=80 V	TJ=25°C	-	20	-	nA
		V <sub>R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



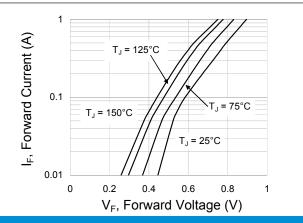
**Fig.1 Forward Current Derating Curve** 



**Fig.2 Typical Junction Capacitance** 



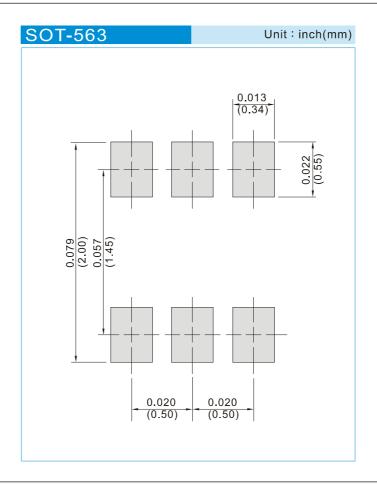








#### MOUNTING PAD LAYOUT



#### **ORDER INFORMATION**

· Packing information

T/R - 4K per 7" plastic Reel

T/R - 10K per 13" plastic Reel

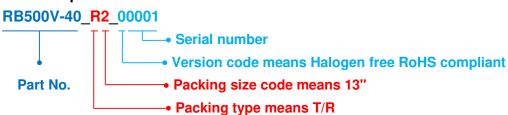




### Part No.\_packing code\_Version

BAS100ATB6\_R1\_00001 BAS100ATB6\_R2\_00001

### For example:



Packing Code XX			Version Code X		Serial number XXXX	
Packing type	1 <sup>st</sup> Code	Packing size code 2 <sup>nd</sup> Code HSF		HSF Level	1 <sup>st</sup> Code	2 <sup>nd</sup> ~5 <sup>th</sup> Code
Tape and Ammunition Box (T/B)	A	N/A	0	Halogen free RoHS compliant	0	serial number
Tape and Reel (T/R)	R	7"	1	RoHS compliant	1	serial number
Bulk Packing (B/P)	В	13"	2			
Tube Packing (T/P)	т	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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