



# BAS21W-AU

## SURFACE MOUNT SWITCHING DIODES

**Voltage**

**250 V**

**Power**

**200mW**

### Features

- Fast switching speed
- Surface mount package Ideally Suited for Automatic insertion
- Electrically Identical to Standard JEDEC
- High Conductance
- 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-323, Plastic
- Terminals: solder plated, solderable per MIL-STD-750, Method 2026
- Weight: 0.0002 ounces, 0.005 grams

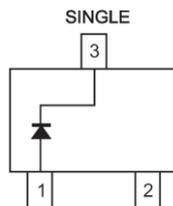
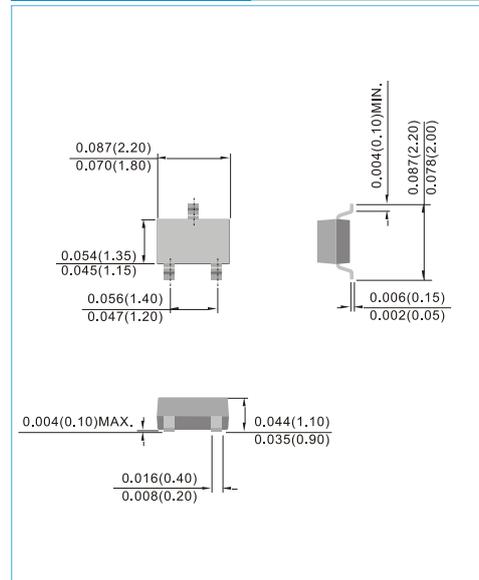


Fig. 14(TOP VIEW)

**SOT-323**

Unit : inch(mm)



### Maximum Ratings And Electrical Characteristics (T<sub>A</sub>=25° C unless otherwise noted)

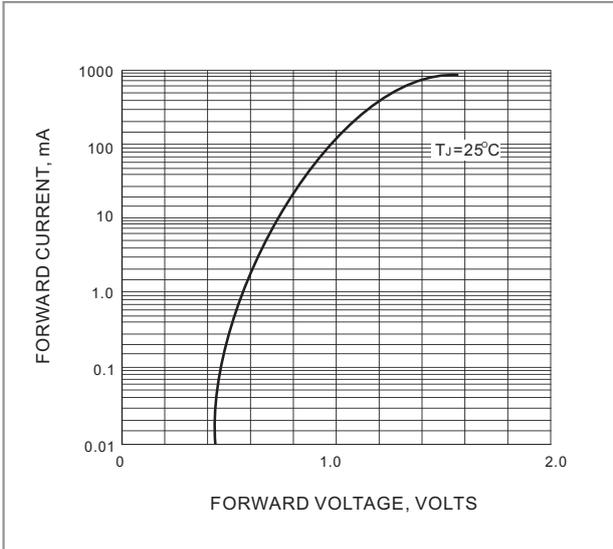
PARAMETER	SYMBOL	VALUE	UNIT
Marking Code		A82	
Reverse Voltage	V <sub>R</sub>	200	V
Peak Reverse Voltage	V <sub>RM</sub>	250	V
Rectified Current (Average), Half Wave Rectification with Resistive Load and f <sub>≥</sub> 50Hz	I <sub>O</sub>	200	mA
Peak Forward Surge Current : 1μs	I <sub>FSM</sub>	4	A
Power Dissipation Derate Above 25°C	P <sub>TOT</sub>	200	mW
Maximum Forward Voltage at 0.1A	V <sub>F</sub>	1	V
Maximum Dc Reverse Current at Rated Dc Blocking Voltage T <sub>J</sub> =25° C	I <sub>R</sub>	0.1	μA
Typical Junction Capacitance (Note 1)	C <sub>J</sub>	5	pF
Maximum Reverse Recovery (Note 2)	T <sub>RR</sub>	50	ns
Typical Thermal Resistance	R <sub>θJA</sub>	625	°C/W
Operating Junction and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	-55 to +150	°C

Note : 1. C<sub>J</sub> at V<sub>R</sub>=0, f=1MHz

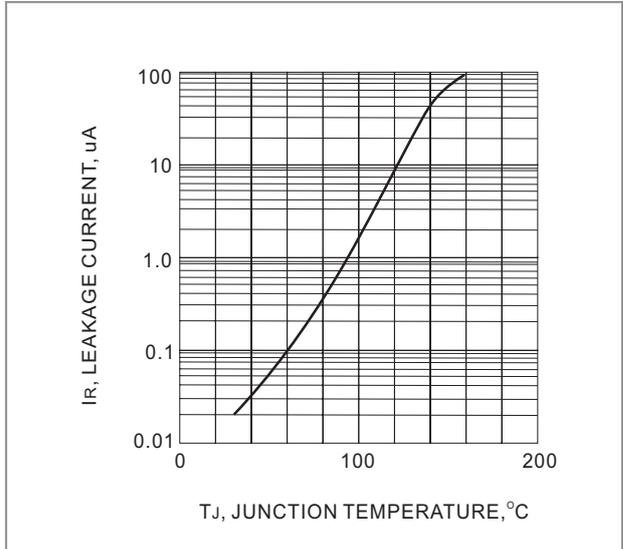
2. From I<sub>F</sub>=10mA to I<sub>R</sub>=1mA, V<sub>R</sub>=6V, R<sub>L</sub>=100Ω



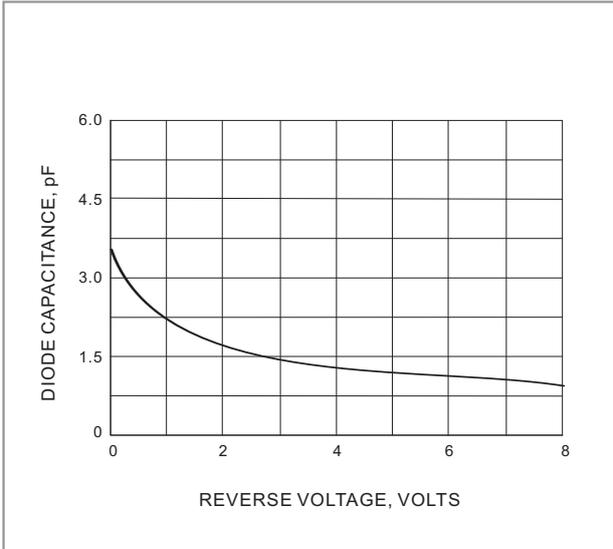
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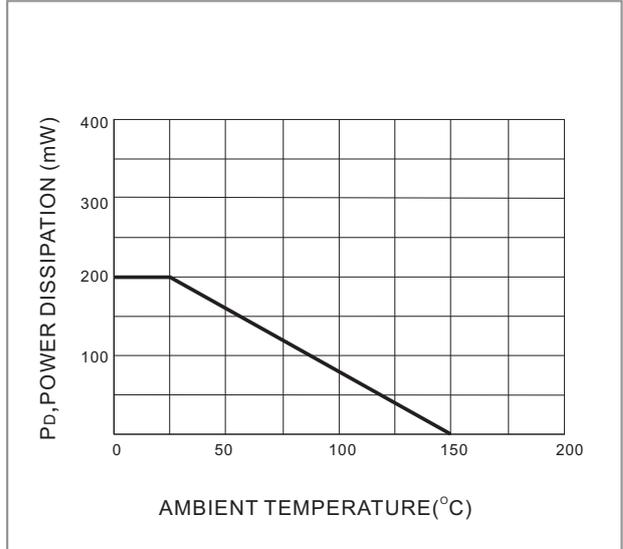
**FIG. 1-TYPICAL FORWARD CHARACTERISTIC**



**Fig.2 LEAKAGE CURRENT vs JUNCTION TEMPERATURE**



**FIG. 3 TYPICAL JUNCTION CAPACITANCE**

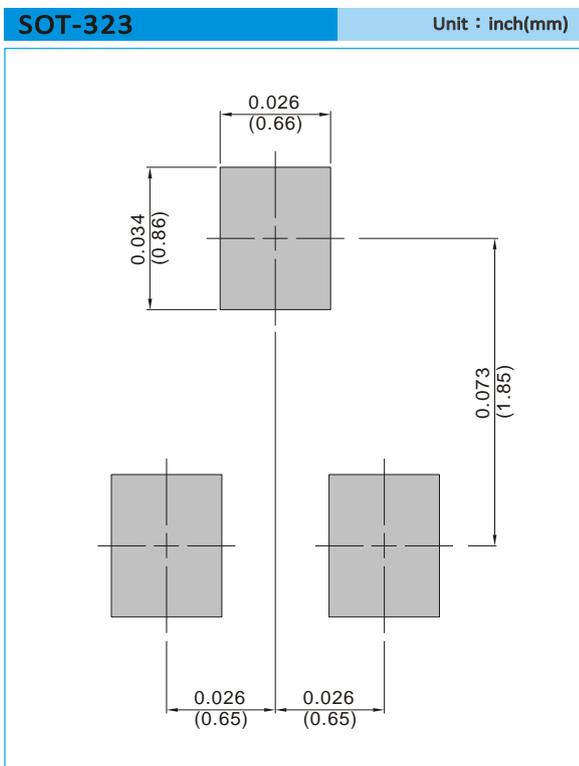


**FIG. 4 POWER DERATING CURVE**



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## MOUNTING PAD LAYOUT



## ORDER INFORMATION

- Packing information  
T/R – 12K per 13" plastic Reel  
T/R – 3K per 7" plastic Reel



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**Part No\_packing code\_Version**

BAS21W-AU\_R1\_000A1

BAS21W-AU\_R2\_000A1

**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)	<b>A</b>	N/A	<b>0</b>	<b>HF</b>	<b>0</b>	serial number
Tape and Reel (T/R)	<b>R</b>	7"	<b>1</b>	<b>RoHS</b>	<b>1</b>	serial number
Bulk Packing (B/P)	<b>B</b>	13"	<b>2</b>			
Tube Packing (T/P)	<b>T</b>	26mm	<b>X</b>			
Tape and Reel (Right Oriented) (TRR)	<b>S</b>	52mm	<b>Y</b>			
Tape and Reel (Left Oriented) (TRL)	<b>L</b>	PANASERT T/B CATHODE UP (PBCU)	<b>U</b>			
FORMING	<b>F</b>	PANASERT T/B CATHODE DOWN (PBCD)	<b>D</b>			



## **BAS21W-AU**

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