

# BAS21W-AU

## SURFACE MOUNT SWITCHING DIODES

<b>Voltage</b>	<b>250 V</b>	<b>Power</b>	<b>200mW</b>
----------------	--------------	--------------	--------------

### 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

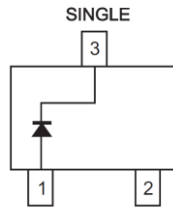
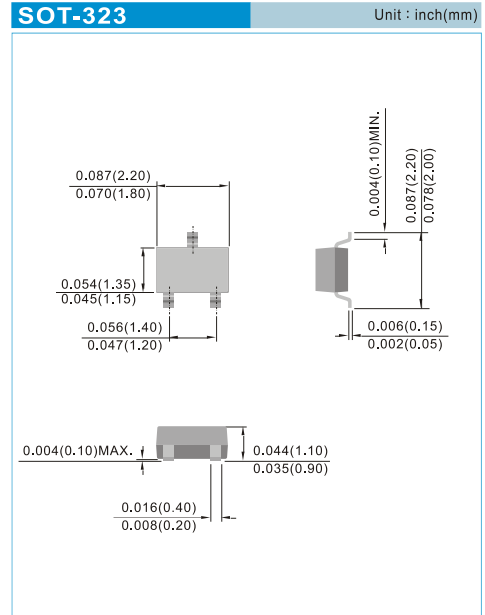


Fig.14(TOP VIEW)



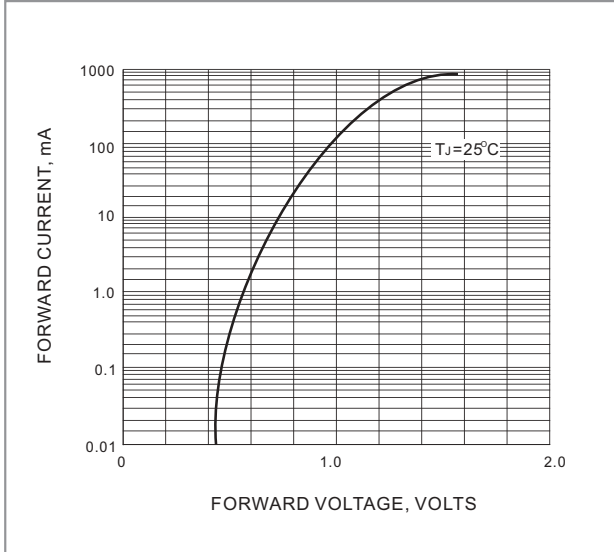
### Maximum Ratings And Electrical Characteristics (T<sub>A</sub>=25°C unless otherwise noted)

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

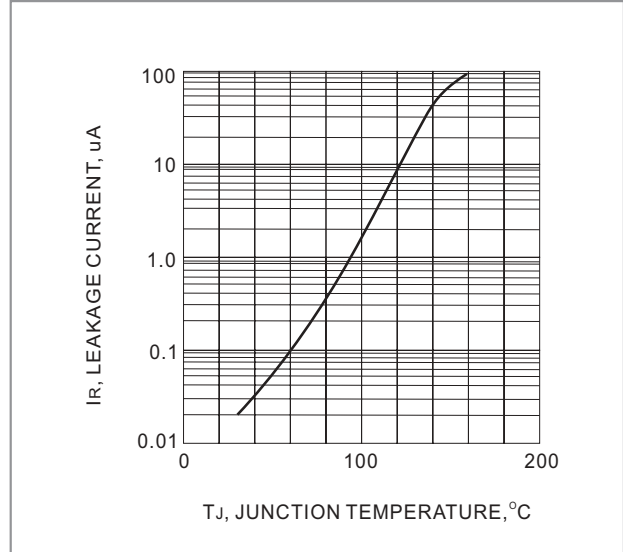
Note : 1. C<sub>J</sub> at V<sub>R</sub>=0, f=1MHz

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

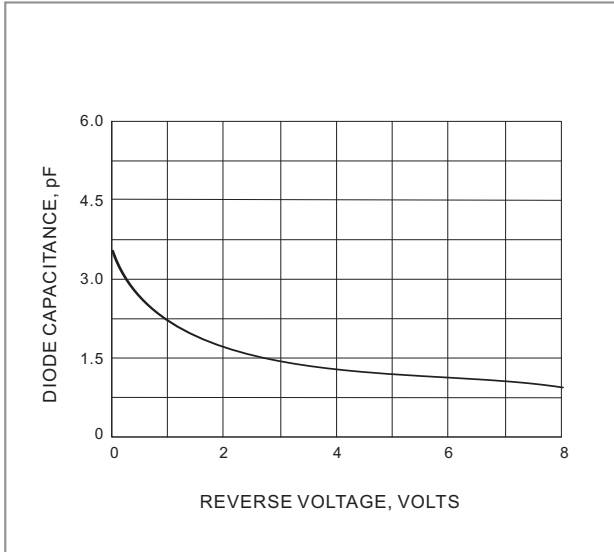
# BAS21W-AU



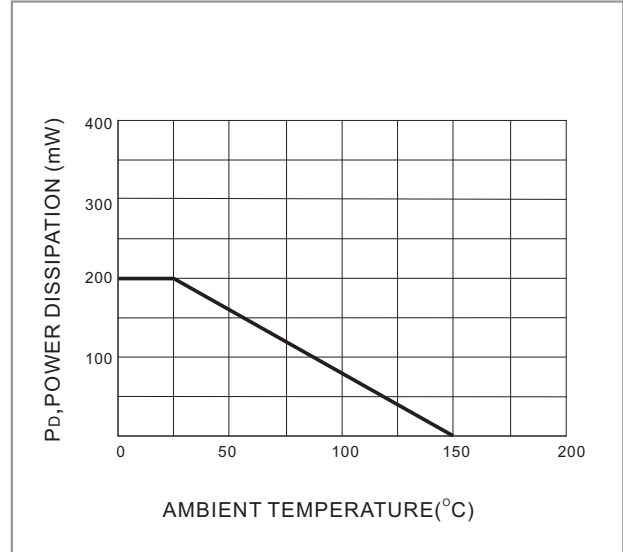
**FIG. 1-TYPICAL FORWARD CHARACTERISTIC**



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



**FIG. 3 TYPICAL JUNCTION CAPACITANCE**



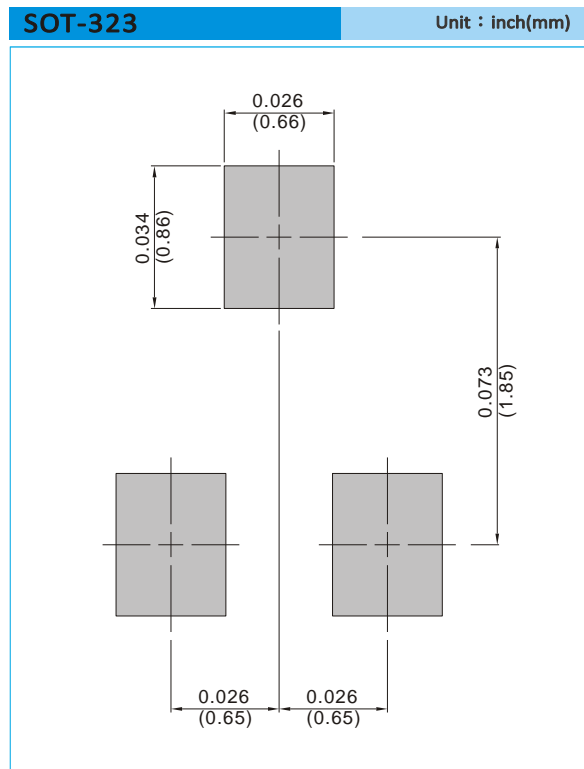
**FIG. 4 POWER DERATING CURVE**

# BAS21W-AU

## Product and Packing Information

Part No.	Package Type	Packing Type	Marking
BAS21W-AU	SOT-323	3K pcs / 7" reel	A82
BAS21W-AU	SOT-323	12K pcs / 13" reel	A82

## Mounting Pad Layout



## BAS21W-AU

---

### Disclaimer

- Reproducing and modifying information of the document is prohibited without permission from Panjit International Inc..
- Panjit International Inc. reserves the rights to make changes of the content herein the document follow PCN procedure. Please refer to our website for the latest document.
- Panjit International Inc. disclaims any and all liability arising out of the application or use of any product including damages incidentally and consequentially occurred.
- Panjit International Inc. does not assume any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.
- Applications shown on the herein document are examples of standard use and operation. Customers are responsible in comprehending the suitable use in particular applications. Panjit International Inc. makes no representation or warranty that such applications will be suitable for the specified use without further testing or modification.
- The products shown herein are not designed and authorized for equipments relating to human life and for any applications concerning life-saving or life-sustaining, such as medical instruments, aerospace machinery et cetera. Customers using or selling these products for use in such applications do so at their own risk and agree to fully indemnify Panjit International Inc. for any damages resulting from such improper use or sale.
- Since Panjit uses lot number as the tracking base, please provide the lot number for tracking when complaining.