



# BAV19WS-AU~BAV21WS-AU

## SURFACE MOUNT SWITCHING DIODES

**VOLTAGE** 120-250 Volt    **POWER** 200mWatt

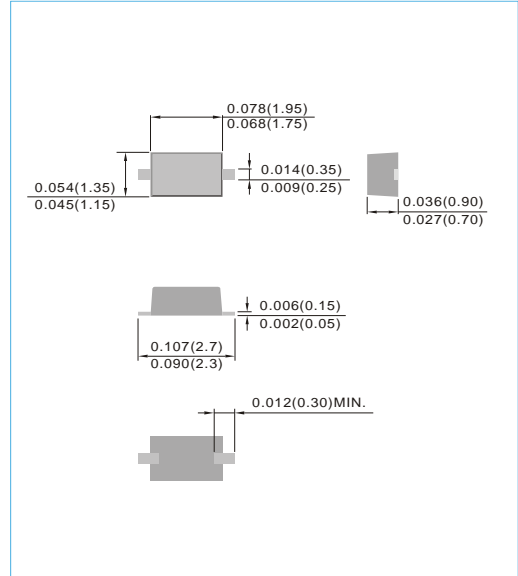
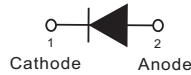
**SOD-323**    Unit : inch(mm)

### 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: SOD-323, Plastic
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 0.00014 ounces, 0.0041 grams



## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified. For capacitive load, derate current by 20%.

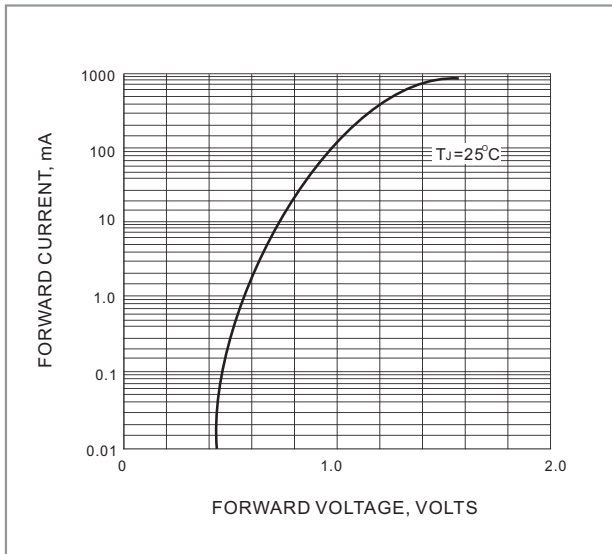
PARAMETER	SYMBOL	BAV19WS-AU	BAV20WS-AU	BAV21WS-AU	UNITS
Marking Code		A8	A80	A82	
Reverse Voltage	$V_R$	100	150	200	V
Peak Reverse Voltage	$V_{RM}$	120	200	250	V
Rectified Current (Average), Half Wave Rectification with Resistive Load and $f \geq 50$ Hz	$I_O$	200			mA
Peak Forward Surge Current, 0.001ms	$I_{FSM}$	4			A
Power Dissipation Derate Above 25°C	$P_{TOT}$	200			mW
Maximum Forward Voltage at 0.1A	$V_F$	1			V
Maximum DC Reverse Current at Rated DC Blocking Voltage $T_J=25^\circ\text{C}$	$I_R$	0.1			$\mu\text{A}$
Typical Junction Capacitance (Note 1)	$C_J$	5			pF
Maximum Reverse Recovery Time (Note 2)	$T_{RR}$	50			ns
Maximum Thermal Resistance (Note 3) (Note 4)	$R_{\theta JA}$ $R_{\theta JC}$	640 260			$^\circ\text{C} / \text{W}$
Operating Junction and Storage Temperature Range	$T_J, T_{STG}$	-55 to +150			$^\circ\text{C}$

**NOTE :**

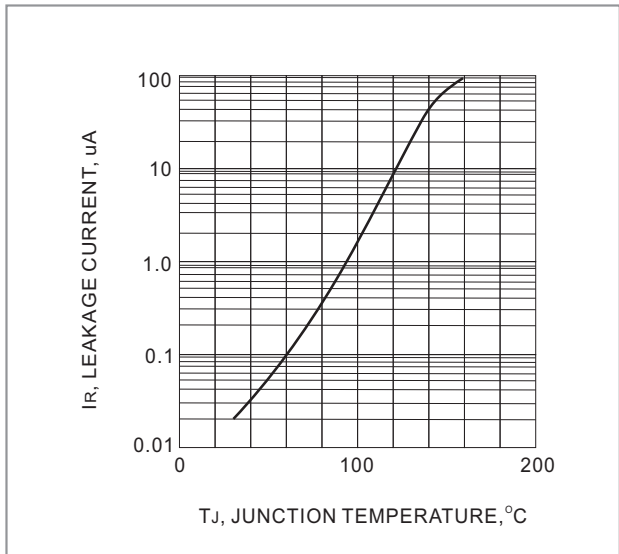
- 1.CJ at  $V_R=0, f=1\text{MHZ}$
- 2.From  $I_F=10\text{mA}$  to  $I_R=1\text{mA}$ ,  $V_R=6\text{Volts}$ ,  $R_L=100\Omega$
- 3.Mounted with minmum recommended pas eize, PC Board FR4
- 4.Mounted on a FR4 PCB, single-sided copper, with 100cm<sup>2</sup> copper pad area



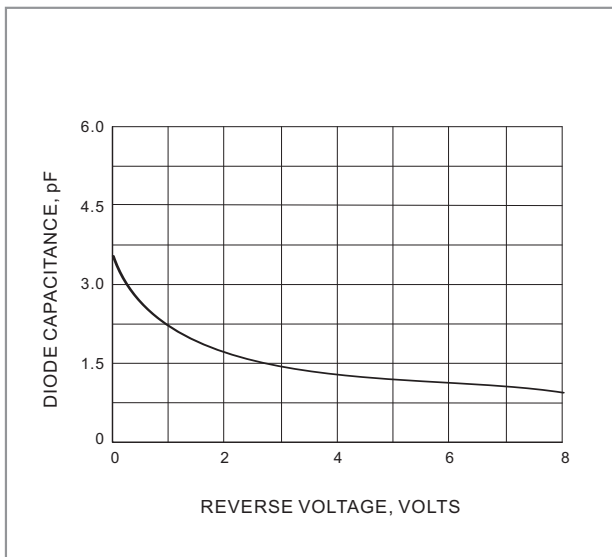
# BAV19WS-AU~BAV21WS-AU



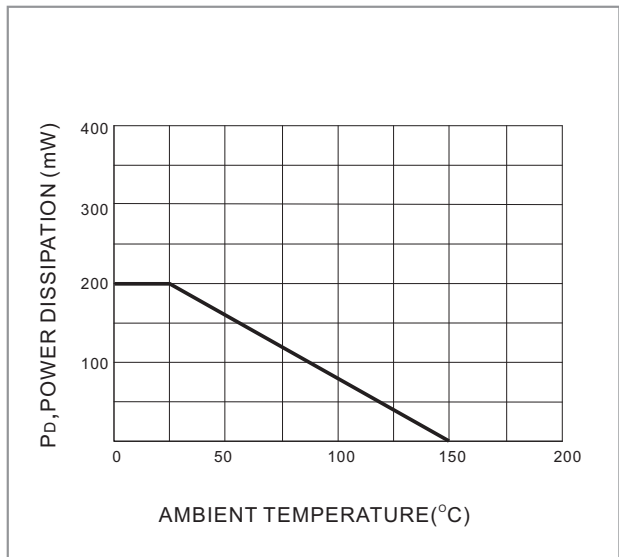
**FIG. 1-TYPICAL FORWARD CHARACTERISTIC**



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



**FIG. 3 TYPICAL JUNCTION CAPACITANCE**



**FIG. 4 POWER DERATING CURVE**

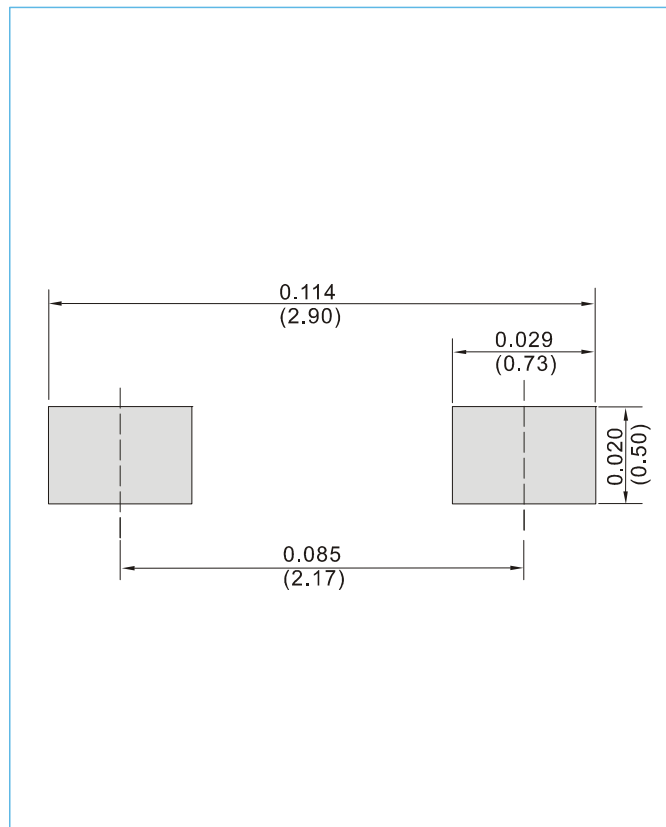


## BAV19WS-AU~BAV21WS-AU

### MOUNTING PAD LAYOUT

SOD-323

Unit : inch(mm)



### ORDER INFORMATION

- Packing information
  - T/R - 12K per 13" plastic Reel
  - T/R - 5K per 7" plastic Reel



## BAV19WS-AU~BAV21WS-AU

### Part No\_packing code\_Version

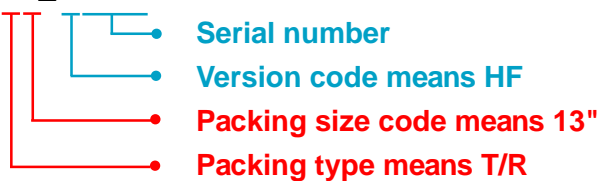
BAV19WS-AU\_R1\_000A1

BAV19WS-AU\_R2\_000A1

For example :

**RB500V-40** **R2** **00001**

Part No.



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>			



## BAV19WS-AU~BAV21WS-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 anytime without notification. 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.