

BAV19WS~BAV21WS

SURFACE MOUNT SWITCHING DIODES

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

SOD-323

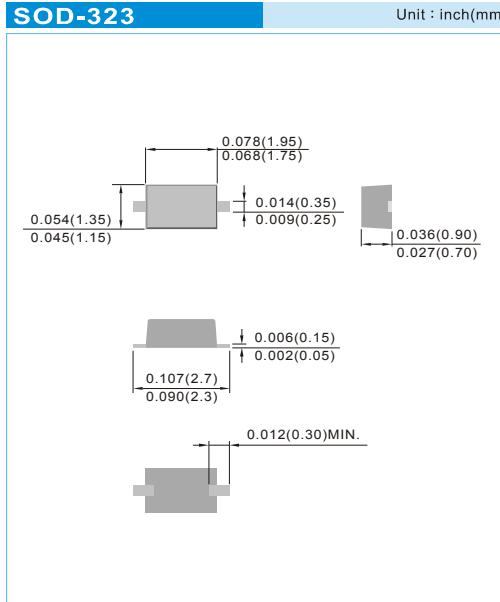
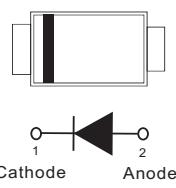
Unit : inch(mm)

FEATURES

- Fast switching speed.
- Surface mount package ideally suited for automatic insertion
- Electrically identical to Standard JEDEC
- High conductance
- Lead free in compliance with EU RoHS 2.0
- Green molding compound as per IEC 61249 standard

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	BAV20WS	BAV21WS	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 ≥ 50 Hz	I _o		200		mA
Peak Forward Surge Current, 0.001ms	I _{FSM}		4		A
Repetitive Peak Forward Current at f ≥ 50 Hz, Θ=180°, Tamb=25°C	I _{FRM}		625		mA
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°C	I _R		0.1		µA
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 _{θJA} R _{θJC}		640 260		°C / W
Operating Junction and Storage Temperature Range	T _J , T _{STG}		-55 to +150		°C

NOTE :

- 1.CJ at V_R=0, f=1MHZ
- 2.From I_F=10mA to I_R=1mA, V_R=6Volts, R_L=100Ω
- 3.Mounted with minimum recommended package, PC Board FR4
- 4.Mounted on a FR4 PCB, single-sided copper, with 100cm² copper pad area

BAV19WS~BAV21WS

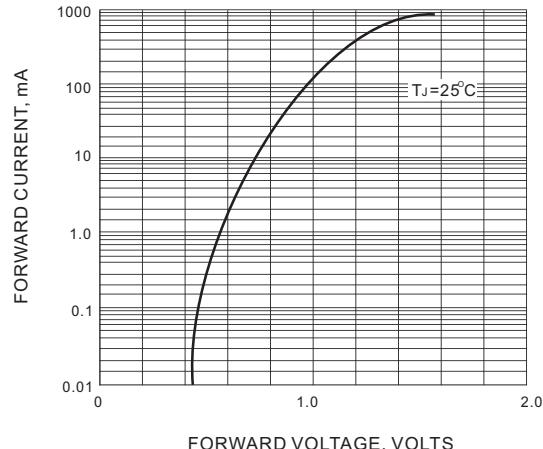


FIG. 1-TYPICAL FORWARD CHARACTERISTIC

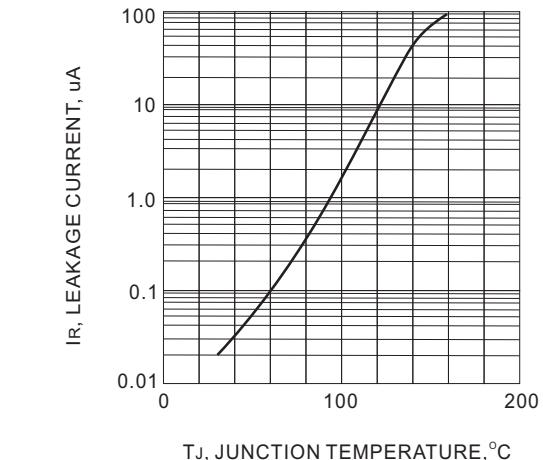


Fig.2 LEAKAGE CURRENT vs JUNCTION TEMPERATURE

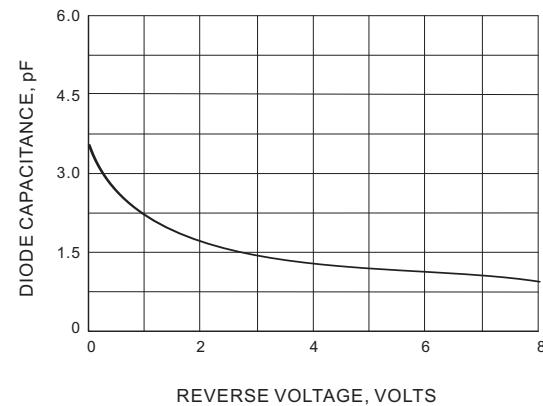


FIG. 3 TYPICAL JUNCTION CAPACITANCE

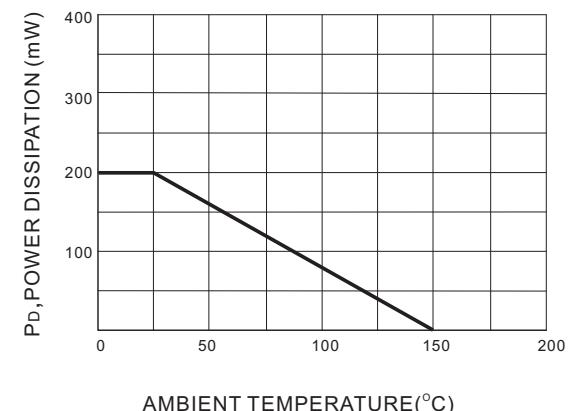
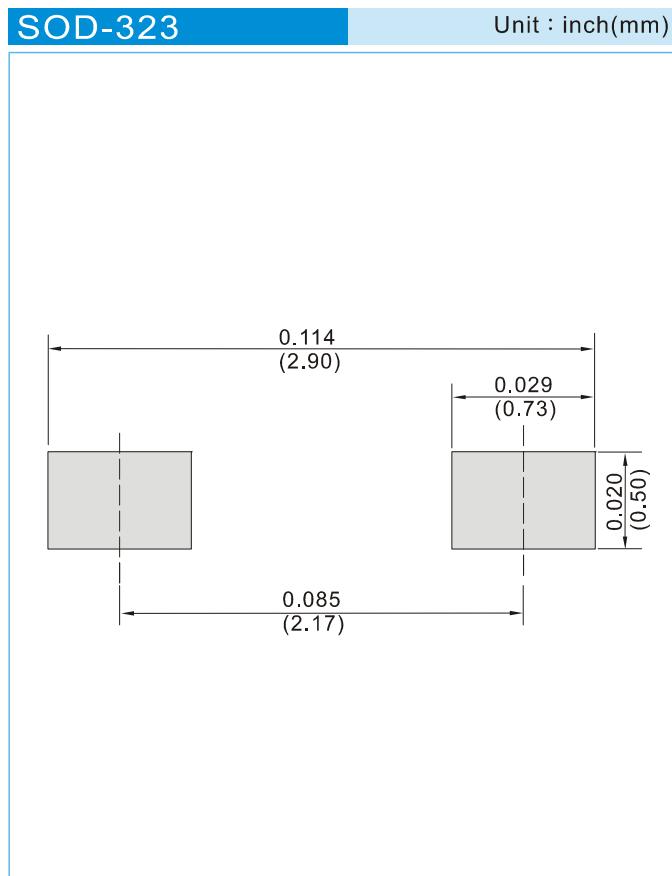


FIG. 4 POWER DERATING CURVE

BAV19WS~BAV21WS

MOUNTING PAD LAYOUT



ORDER INFORMATION

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

BAV19WS~BAV21WS

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 requiring high level of reliability or relating to human life and for any applications concerning life-saving or life-sustaining, such as medical instruments, transportation equipment, 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.