PANJIT SEMI CONDUCTOR

BAV19W~BAV21W

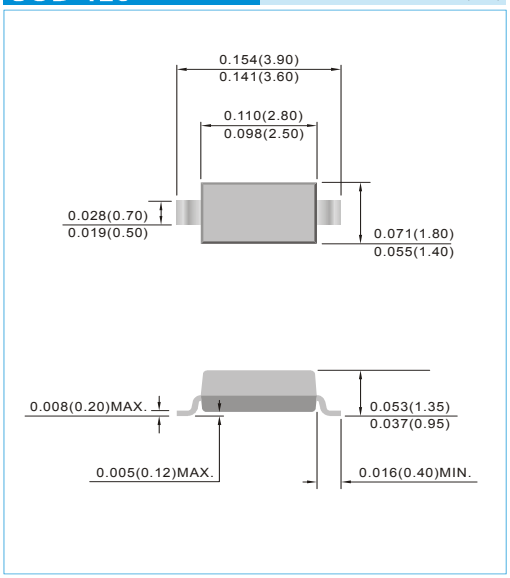
SURFACE MOUNT SWITCHING DIODES

VOLTAGE 120-250 Volt **POWER** 410mWatt

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

SOD-123 Unit : inch(mm)



MECHANICAL DATA

Case: SOD-123, Plastic

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

Approx. Weight: 0.0004 ounces, 0.01 grams

Cathode Anode

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

PARAMETER	SYMBOL	BAV19W	BAV20W	BAV21W	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,1ms	I_{FSM}	4			A
Power Dissipation Derate Above 25°C	P_{TOT}	410			mW
Maximum Forward Voltage at 0.1A	V_F	1			V
Maximum Reverse Current at T_J=25°C	I_R	0.1@100	0.1@150	0.1@200	uA
Typical Junction Capacitance(Notes1)	C_J	5			pF
Maximum Reverse Recovery (Notes2)	T_{RR}	50			ns
Typical Thermal Resistance	$R\Theta JA$	450			°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

BAV19W~BAV21W

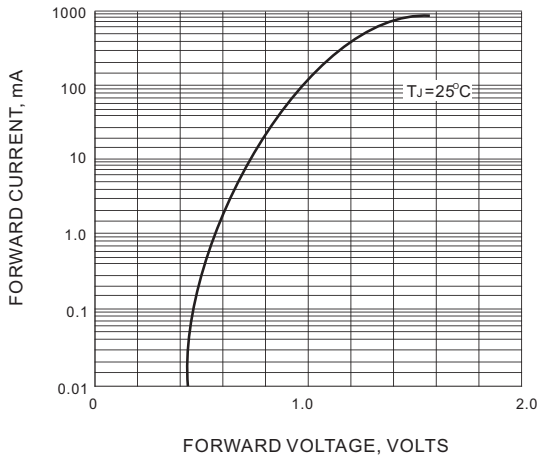


FIG. 1-TYPICAL FORWARD CHARACTERISTIC

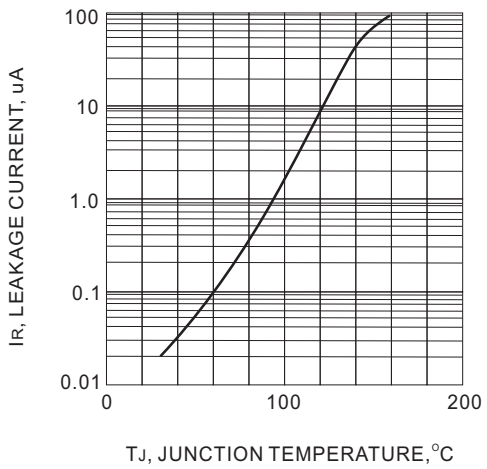


Fig.2 LEAKAGE CURRENT vs JUNCTION TEMPERATURE

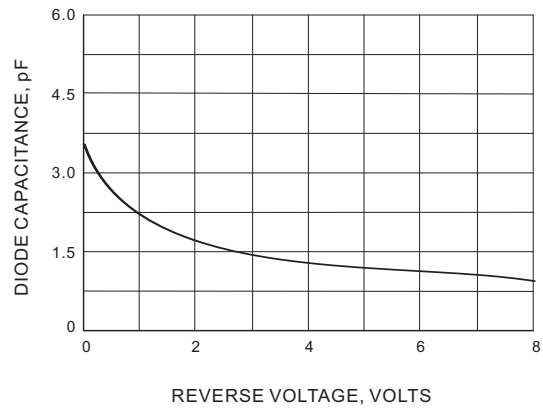


FIG. 3 TYPICAL JUNCTION CAPACITANCE

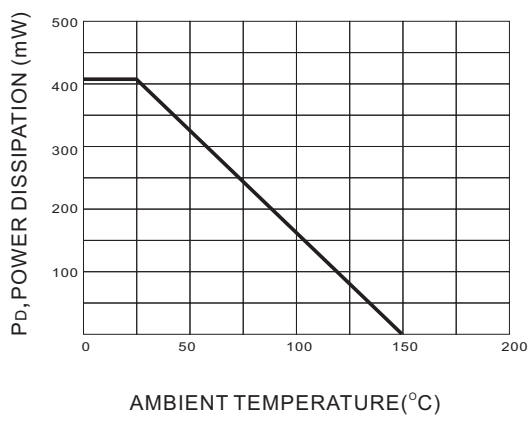
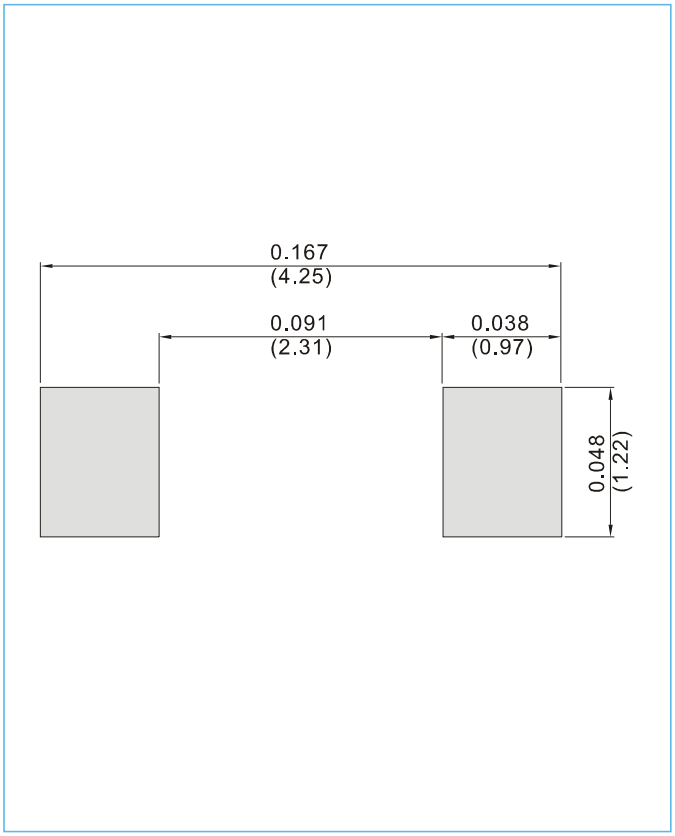


FIG. 4 POWER DERATING CURVE

BAV19W~BAV21W

MOUNTING PAD LAYOUT

SOD-123 Unit : inch(mm)



ORDER INFORMATION

- Packing information

  T/R - 10K per 13" plastic Reel

  T/R - 3K per 7" plastic Reel

BAV19W~BAV21W

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.