

BAV19WS~BAV21WS

SURFACE MOUNT SWITCHING DIODES

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

SOD-323

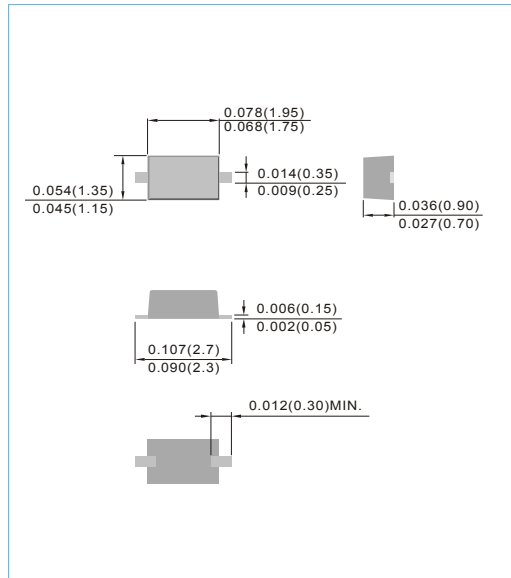
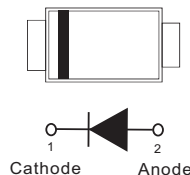
Unit : inch(mm)

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 $f \geq 50$ Hz	I_O	200			mA
Peak Forward Surge Current, 0.001ms	I_{FSM}	4			A
Repetitive Peak Forward Current at $f \geq 50$ Hz, $\theta = 180^\circ$, $T_{amb} = 25^\circ\text{C}$	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 $T_J = 25^\circ\text{C}$	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)	$R_{\theta JA}$ $R_{\theta JC}$	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. C_J 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^2 copper pad area

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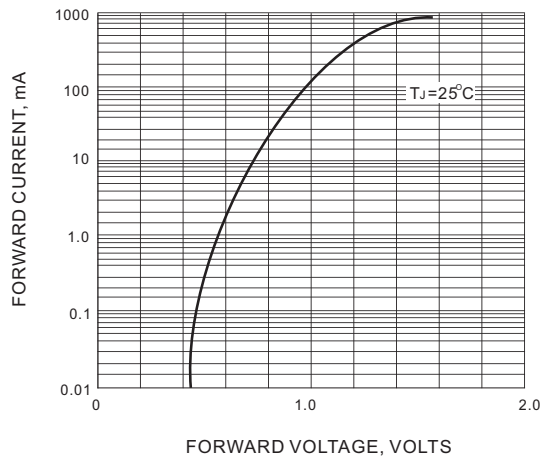


FIG. 1-TYPICAL FORWARD CHARACTERISTIC

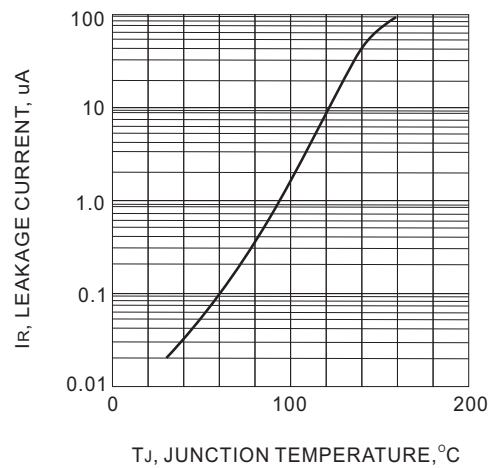


Fig.2 LEAKAGE CURRENT vs JUNCTION TEMPERATURE

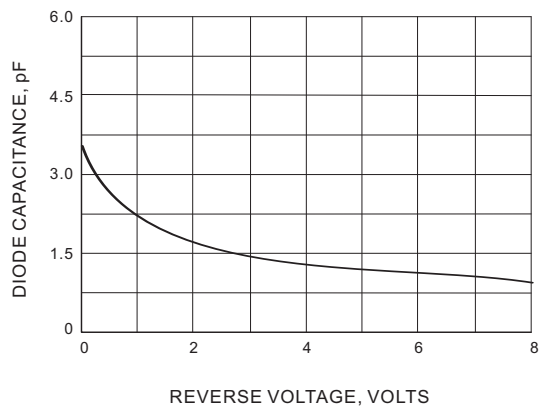


FIG. 3 TYPICAL JUNCTION CAPACITANCE

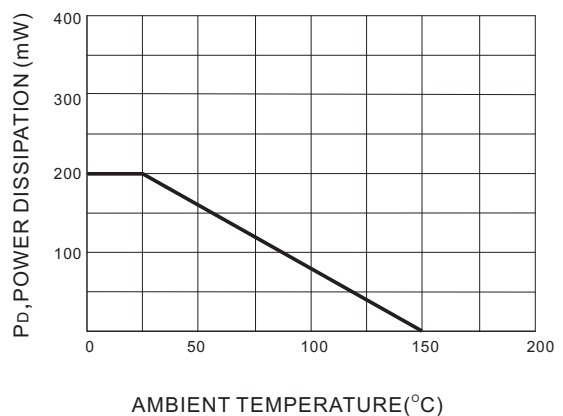


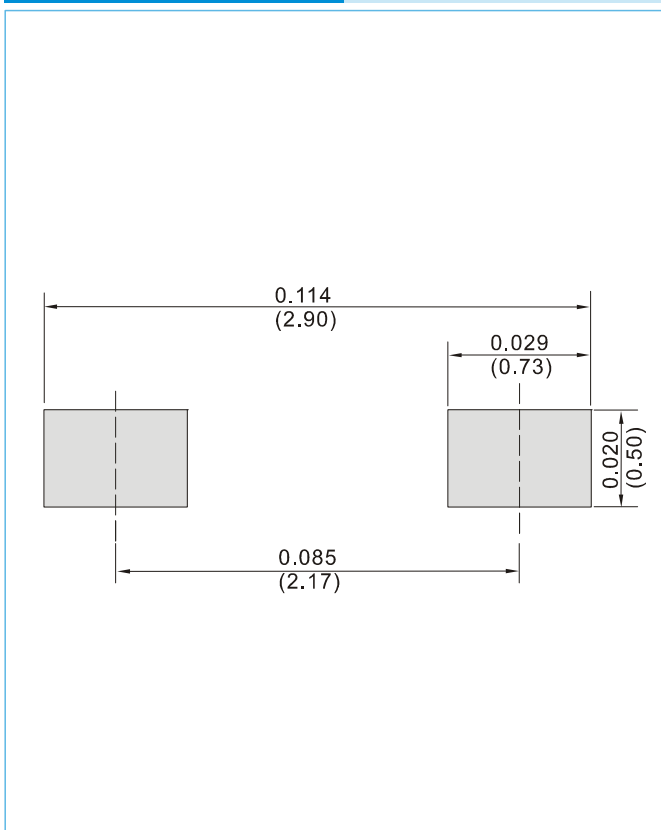
FIG. 4 POWER DERATING CURVE

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MOUNTING PAD LAYOUT

SOD-323

Unit : inch(mm)



ORDER INFORMATION

- Packing information

T/R - 12K per 13" plastic Reel

T/R - 5K per 7" plastic Reel

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Part No_packing code_Version

BAV19WS_R1_00001

BAV19WS_R2_00001

For example :

RB500V-40_R2_00001



Packing Code XX				Version Code XXXXXX		
Packing type	1 st Code	Packing size code	2 nd Code	HF or RoHS	1 st Code	2 nd ~5 th Code
Tape and Ammunition Box (T/B)	A	N/A	0	HF	0	serial number
Tape and Reel (T/R)	R	7"	1	RoHS	1	serial number
Bulk Packing (B/P)	B	13"	2			
Tube Packing (T/P)	T	26mm	X			
Tape and Reel (Right Oriented) (TRR)	S	52mm	Y			
Tape and Reel (Left Oriented) (TRL)	L	PANASERT T/B CATHODE UP (PBCU)	U			
FORMING	F	PANASERT T/B CATHODE DOWN (PBCD)	D			



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