RECTRON
SEMICONDUCTOR
TECHNICAL SPECIFICATION

BAV19WS
BAV20WS
BAV21WS

SMALL SIGNAL DIODE

VOLTAGE RANGE 120 to 250 Volts CURRENT 200 mAmpere

FEATURES

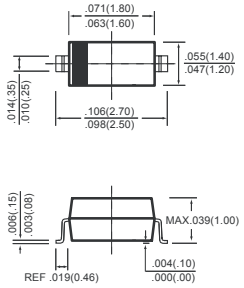
* Fast Switching Speed
* Surface Mount Package Ideally Suited for Automatic Insertion
* For General Purpose Switching Applications

MECHANICAL DATA

* Case: Molded plastic
* Epoxy: UL 94V-O rate flame retardant
* Lead: MIL-STD-202E method 208C guaranteed
* Mounting position: Any
* Weight: 0.004 grams



SOD-323



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.
Single phase, half wave, 60 Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

MAXIMUM RATINGS (@T_A=25°C unless otherwise noted)

RATINGS		SYMBOL	BAV19WS	BAV20WS	BAV21WS	UNITS
Non-Repetitive Peak Reverse Voltage		V_{RM}	120	200	250	Volts
Maximum Repetitive Peak Reverse Voltage Maximum Working Peak reverse Voltage Maximum DC Blocking Voltage		V_{RRM} V_{RWM} V_R	100	150	200	Volts
RMS Reverse Voltage		V_{RMS}	71	106	141	Volts
Forward Comtinuous Current		I_{FM}	400			mAmps
Average Rectified Output Current		I_O	200			mAmps
Peak Forward Surge Current	@t<1.0mS @t<1.0S	I_{FSM}	2.5 0.5			Amps
Repetitive Peak Forward Current		I_{FRM}	625			mAmps
Reverse Recovery Time(I_F=I_R=30mA I_{rr}=0.1XI_R,R_L=100Ω)		T_{rr}	50			nS
Capacitance between terminals (V_R=0V,f=1MHz)		C_T	5			pF
Power Dissipation		P_D	200			mW
Storage Temperature Range		T_{STG}	-65 to + 150			°C

ELECTRICAL CHARACTERISTICS (@T_A=25°C unless otherwise noted)

CHARACTERISTICS		SYMBOL	BAV19WS	BAV20WS	BAV21WS	UNITS
Forward Voltage	@IF=0.1A @IF=0.2A	V_F		1.0 1.25		Volts
Reverse Current	@VR=100V (BAV19WS) @VR=150V (BAV20WS) @VR=200V (BAV21WS)	I_R		0.1		uAmps

Note 1: "Fully ROHS compliant", "100% Sn plating (Pb-free)".

RATING AND CHARACTERISTICS CURVES (BAV19WS/BAV20WS/BAV21WS)

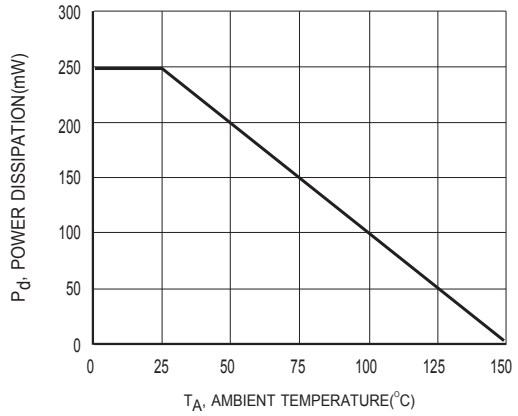


Figure1 Power Derating Curve

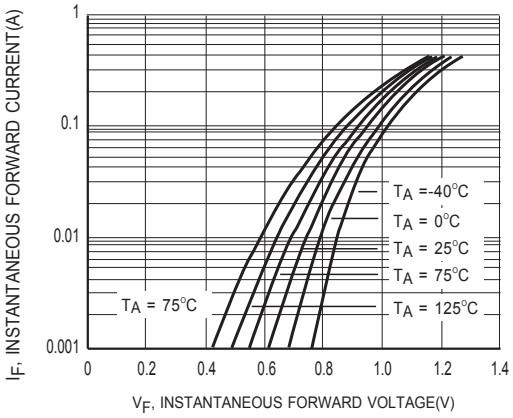


Figure2 Typical Foward Characteristics

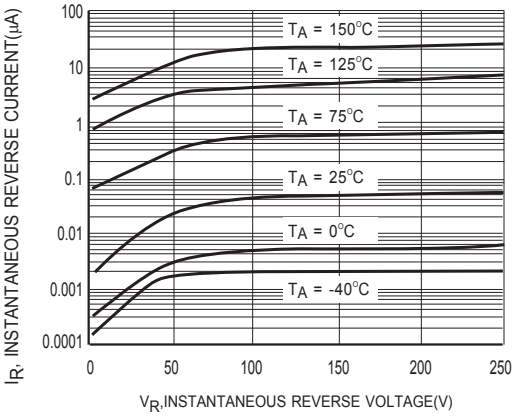


Figure3 Typical Reverse Characteristics

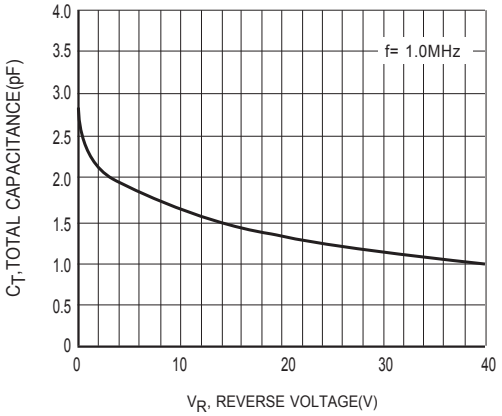


Figure4 Typical Capacitance vs Reverse Voltage

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