RECTRON
SEMICONDUCTOR
TECHNICAL SPECIFICATION

BAV20W

SMALL SIGNAL DIODE

VOLTAGE RANGE 150 Volts CURRENT 200 mAmpere

FEATURES

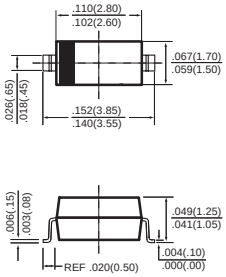
* Fast Switching Speed
* Surface Mount Package Ideally Suited for Automatic Insertion
* General Purpose Switching Applications

MECHANICAL DATA

* Case: Molded plastic
* Epoxy: UL 94V-O rate flame retardant
* Lead: MIL-STD-202E method 208C guaranteed
* Mounting position: Any
* Weight: 0.01 gram



SOD-123



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 (@ TA=25 °C unless otherwise noted)

RATINGS		SYMBOL	BAV20W	UNITS
Non-Repetitive Peak Reverse Voltage		V_{RM}	200	Volts
Maximum Repetitive Peak Reverse Voltage Maximum Working Peak reverse Voltage Maximum DC Blocking Voltage		V_{RRM} V_{RWM} V_R	150	Volts
Maximum RMS Voltage		V_{RMS}	106	Volts
Maximum Forward Comtinuous Current		I_{FM}	400	mAmps
Maximum Average Forward Rectified Current		I_O	200	mAmps
Non-Repetitive Peak Forward Surge Current	@t=1.0mS @t=1.0S	I_{FSM}	2.5 0.5	Amps
Typical Reverse Recovery Time(I_F=I_R=30mA,I_{rr}=0.1XI_R,R_L=100Ω)		T_{rr}	50	nS
Typical Junction Capacitance(V_R=0V,f=1MHz)		C_T	5	pF
Maximum Power Dissipation		P_D	250	mW
Typical Thermal Resistance		$R_{\Theta JA}$	500	°C/W
Operating and Storage Temperature Range		T_J,T_{STG}	-65 to + 150	°C

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

CHARACTERISTICS		SYMBOL	BAV20W	UNITS
Maximum Instantaneous Forward Voltage	@I_F=0.1A @I_F=0.2A	V_F	1.0 1.25	Volts
Maximum Instantaneous Reverse Current	@V_R=150V	I_R	0.1	uAmps

2006-3

RATING AND CHARACTERISTICS CURVES (BAV20W)

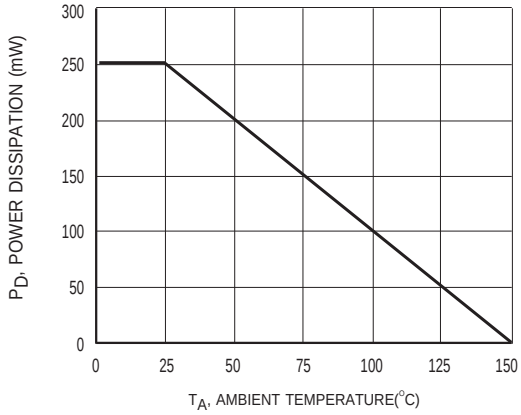


Figure1 Power Derating Curve

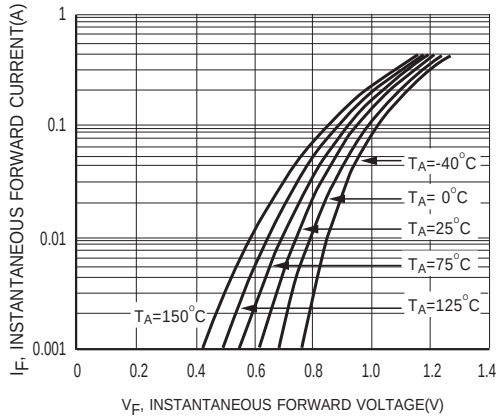


Figure2 Typical Foward Characteristics

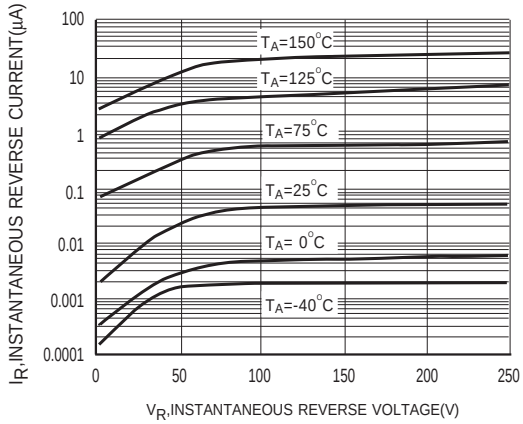


Figure3 Typical Reverse Characteristics

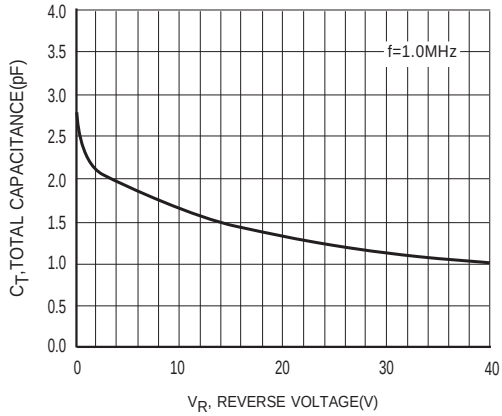


Figure4 Typical Capacitance vs Reverse Voltage

DISCLAIMER NOTICE

Rectron Inc reserves the right to make changes without notice to any product specification herein, to make corrections, modifications, enhancements or other changes. Rectron Inc or anyone on its behalf assumes no responsibility or liability for any errors or inaccuracies. Data sheet specifications and its information contained are intended to provide a product description only. "Typical" parameters which may be included on RECTRON data sheets and/ or specifications can and do vary in different applications and actual performance may vary over time. Rectron Inc does not assume any liability arising out of the application or use of any product or circuit.

Rectron products are not designed, intended or authorized for use in medical, life-saving implant or other applications intended for life-sustaining or other related applications where a failure or malfunction of component or circuitry may directly or indirectly cause injury or threaten a life without expressed written approval of Rectron Inc. Customers using or selling Rectron components for use in such applications do so at their own risk and shall agree to fully indemnify Rectron Inc and its subsidiaries harmless against all claims, damages and expenditures.