RECTRON
SEMICONDUCTOR
TECHNICAL SPECIFICATION

BAV20W

SMALL SIGNAL DIODE

VOLTAGE RANGE 150 Volts CURRENT 200 mAmpere

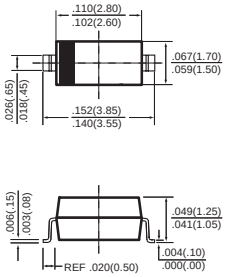
FEATURES

* 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)

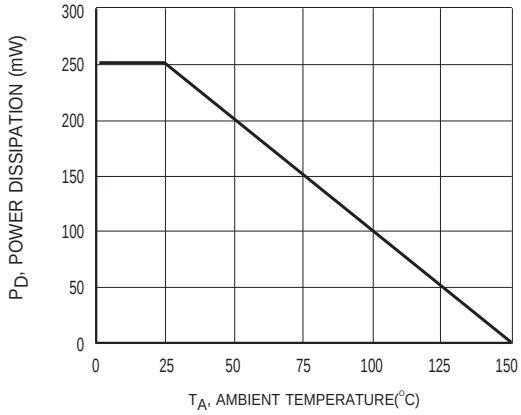


Figure1 Power Derating Curve

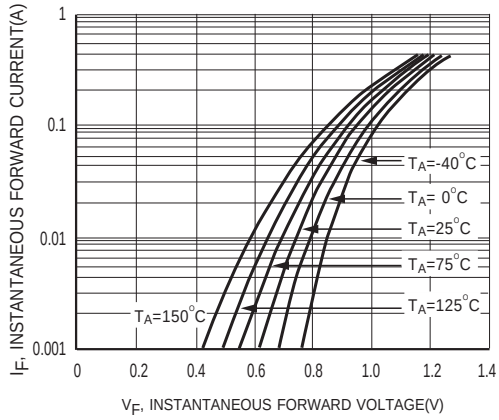


Figure2 Typical Foward Characteristics

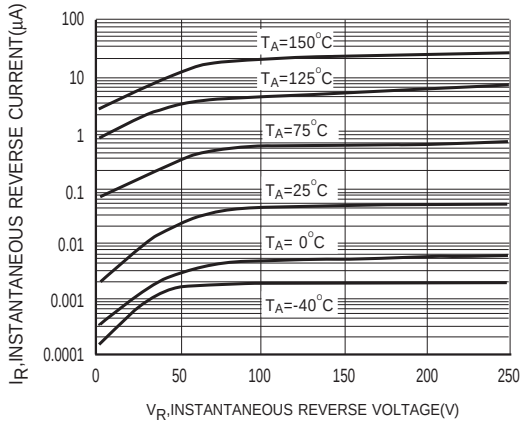


Figure3 Typical Reverse Characteristics

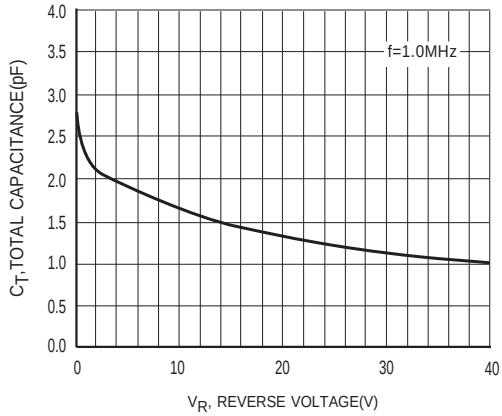


Figure4 Typical Capacitance vs Reverse Voltage

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