

SMALL SIGNAL DIODE

VOLTAGE RANGE 100 Volts CURRENT 200 mAmpere

FEATURES

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

MECHANICAL DATA

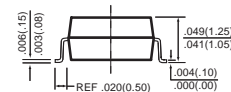
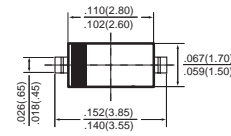
- * Case: Molded plastic
- * Epoxy: UL 94V-O rate flame retardant
- * Lead: MIL-STD-202E method 208C guaranteed
- * Mounting position: Any
- * Weight: 0.01 gram

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%.



SOD-123



Dimensions in inches and (millimeters)

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

RATINGS	SYMBOL	BAV19W	UNITS
Non-Repetitive Peak Reverse Voltage	V_{RM}	120	Volts
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	100	Volts
Maximum Working Peak reverse Voltage	V_{RWM}		
Maximum DC Blocking Voltage	V_R		
Maximum RMS Voltage	V_{RMS}	71	Volts
Maximum Forward Continuous Current	I_{FM}	400	mAmps
Maximum Average Forward Rectified Current	I_O	200	mAmps
Non-Repetitive Peak Forward Surge Current	@t=1.0mS	2.5	Amps
	@t=1.0S	0.5	
Typical Reverse Recovery Time($I_F=I_R=30mA, I_{TR}=0.1X_I, R_L=100\Omega$)	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	BAV19W	UNITS
Maximum Instantaneous Forward Voltage	@ $I_F=0.1A$	1.0	Volts
	@ $I_F=0.2A$	1.25	
Maximum Instantaneous Reverse Current	@ $V_R=100V$	I_R	0.1 uAmps

RATING AND CHARACTERISTICS CURVES (BAV19W)

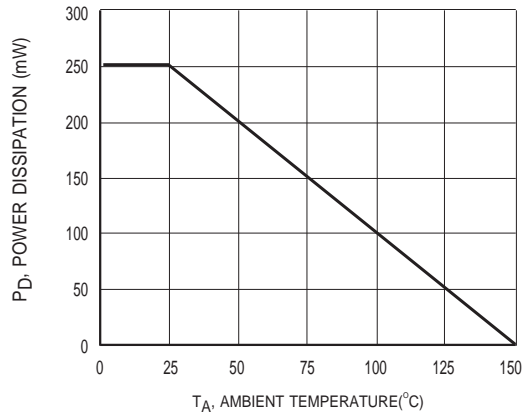


Figure1 Power Derating Curve

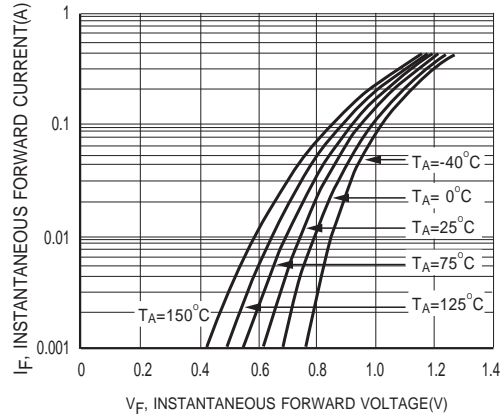


Figure2 Typical Forward Characteristics

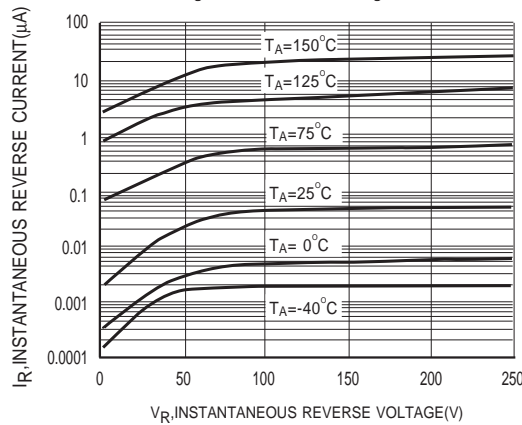


Figure3 Typical Reverse Characteristics

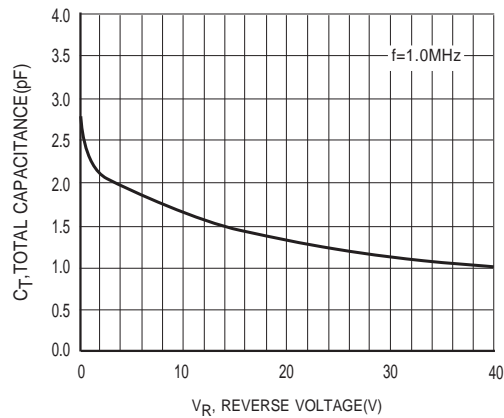


Figure4 Typical Capacitance vs Reverse Voltage

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