

SMALL SIGNAL DIODE

VOLTAGE RANGE 120 to 250 Volts CURRENT 200 mAmpere

FEATURES

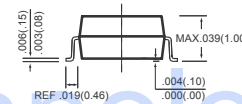
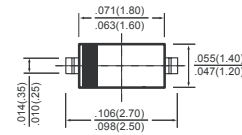
- * Fast Switching Speed
- * Surface Mount Package Ideally Suited for Automatic Insertion
- * For General Purpose Switching Applications

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 (@_TA=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	V _{RRM}	100	150	200	Volts
Maximum Working Peak reverse Voltage	V _{RWM}				
Maximum DC Blocking Voltage	V _R				
RMS Reverse Voltage	V _{RMS}	71	106	141	Volts
Forward Continuous Current	I _{FM}		400		mAmps
Average Rectified Output Current	I _O		200		mAmps
Peak Forward Surge Current	@t<1.0mS		2.5		Amps
	@t<1.0S		0.5		
Repetitive Peak Forward Current	I _{FRM}		625		mAmps
Reverse Recovery Time(I _F =I _R =30mA I _{rr} =0.1X I _R , R _L =100Ω)	T _{rr}		50		nS
Capacitance between terminals (V _R =0V, f=1MHz)	CT		5		pF
Power Dissipation	PD		200		mW
Storage Temperature Range	T _{STG}		-65 to + 150		°C

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

CHARACTERISTICS	SYMBOL	BAV19WS	BAV20WS	BAV21WS	UNITS
Forward Voltage	@ I _F =0.1A		1.0		Volts
	@ I _F =0.2A		1.25		
Reverse Current	@ V _R =100V (BAV19WS)		0.1		uAmps
	@ V _R =150V (BAV20WS)				
	@ V _R =200V (BAV21WS)				

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

RATING AND CHARACTERISTICS CURVES (BAV19WS/BAV20WS/BAV21WS)

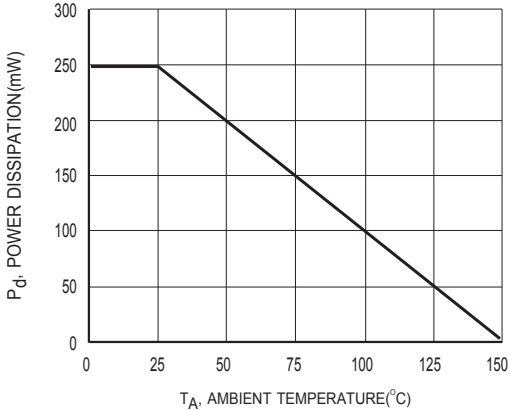


Figure1 Power Derating Curve

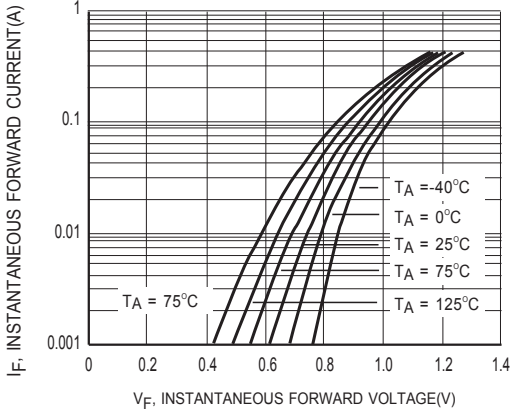


Figure2 Typical Forward Characteristics

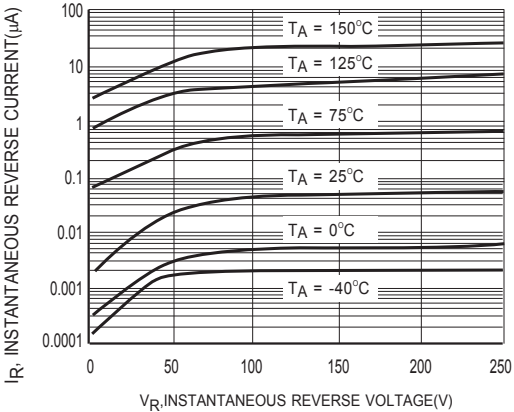


Figure3 Typical Reverse Characteristics

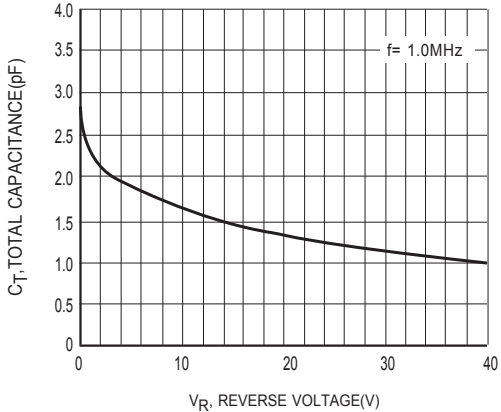


Figure4 Typical Capacitance vs Reverse Voltage

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