



*DC COMPONENTS CO., LTD.*

RECTIFIER SPECIALISTS

**BAV16WS  
THRU  
BAV21WS**

**TECHNICAL SPECIFICATIONS OF SURFACE MOUNT SWITCHING DIODE**

*VOLTAGE RANGE - 100 to 250 Volts*

*CURRENT - 0.15 to 0.2 Ampere*

**FEATURES**

- \* Surface Mount Package Ideally Suited for Automatic Insertion
- \* Low power loss, high efficiency
- \* Low leakage
- \* Low forward voltage
- \* High current capability

**MECHANICAL DATA**

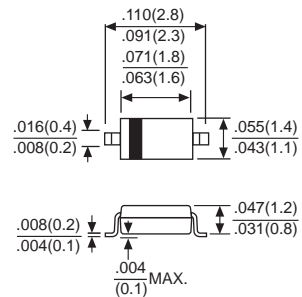
- \* Case: Molded plastic
- \* Epoxy: UL 94V-0 rate flame retardant
- \* Terminals: Solder plated, solderable per MIL-STD-202E, Method 208 guaranteed
- \* Mounting position: Any
- \* Weight: 0.008 grams Approx.

**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-323**



Dimensions in inches(millimeters)

	SYMBOL	BAV16WS	BAV19WS	BAV20WS	BAV21WS	UNITS
Maximum Reverse Voltage	VR	75	100	150	200	V
Maximum Recurrent Peak Reverse Voltage	VRRM	100	120	200	250	V
Maximum Average Rectified Current	Io	150	200			mA
Peak Forward Surge Current	IFSM	2	2.5			A
Maximum Power Dissipation @TA=25°C	Ptot	200				mW
Maximum Forward Voltage	VF	0.855 (@IF=10mA)	1.0 @IF=100mA)			V
Maximum Reverse Current (@VR=VR Max)	IR	1.0				µA
Maximum Reverse Recovery Time(Note 1)	trr	6.0	50			nS
Maximum Junction Capacitance(Note 2)	CJ	2.0	5.0			pF
Typical Thermal Resistance	RθJA	635				°C/W
Operating and Storage Temperature Range	TJ,TSTG	-55 to +125				°C

Note: 1. Test Conditions: BAV16WS @ IF=IR=10mA, IRR=1mA, RL=50Ω ; BAV19WS-BAV21WS @ IF=IR=30mA, IRR=3mA, RL=100Ω

2. Measured at 1MHz and VR=0

# RATING AND CHARACTERISTIC CURVES (BAV16WS THRU BAV21WS)

FIG.1 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

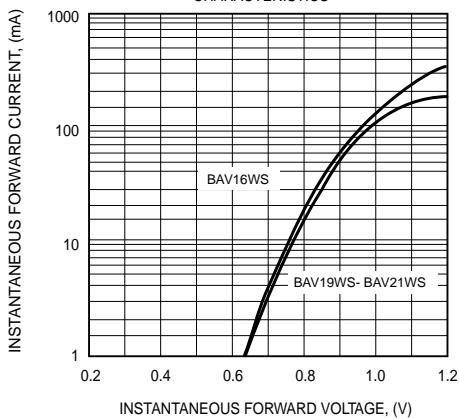


FIG.2 - TYPICAL REVERSE CHARACTERISTICS

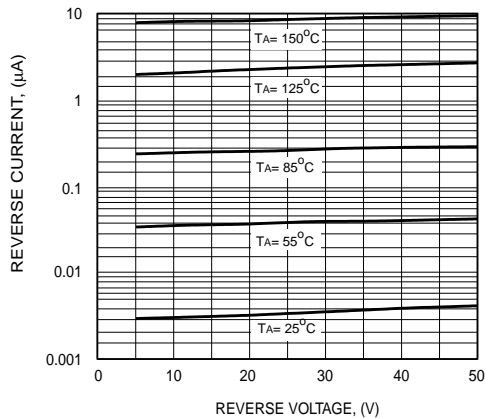
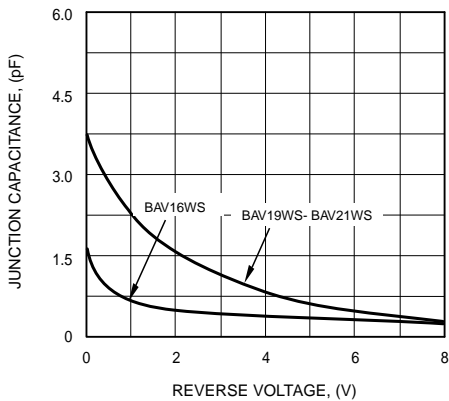


FIG.3 - TYPICAL JUNCTION CAPACITANCE



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