DC COMPONENTS CO., LTD.

RECTIFIER SPECIALISTS

BAV19 THRU BAV21

TECHNICAL SPECIFICATIONS OF HIGH SPEED SWITCHING DIODES

VOLTAGE RANGE - 100 to 200 Volts *CURRENT - 0.2 Ampere*

FEATURES

* Silicon epitaxial planar diodes
* Low power loss, high efficiency
* Low leakage
* Low forward voltage
* High current capability
* High reliability

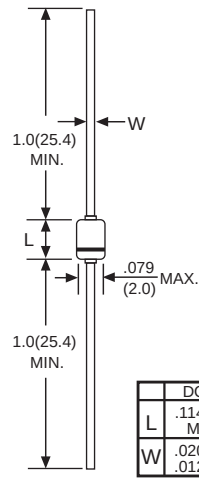
MECHANICAL DATA

* Case: Glass sealed case
* Lead: Solder plated, solderable per MIL-STD-202E, Method 208 guaranteed
* Polarity: Color band denotes cathode end
* Mounting position: Any
* Weight: 0.13 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%.

DO-34 / DO-35



	DO-34	DO-35
L	.114(2.9) MAX.	.165(4.2) MAX.
W	.020(0.5) .012(0.3)	.020(0.50) TYP.

Dimensions in inches and (millimeters)

	SYMBOL	BAV19	BAV20	BAV21	UNITS
Maximum Reverse Voltage	V_R	100	150	200	V
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	120	200	250	V
Maximum Average Rectified Current	Io	200			mA
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	1.0			A
Maximum Power Dissipation Tamb=25°C	Ptot	500			mW
Maximum Forward Voltage (@I_F=100mA)	V_F	1.0			V
Maximum Reverse Current (@V_R=$V_{R\ Max}$)	I_R	0.1			μA
Maximum Reverse Recovery Time(Note 1)	trr	50			nS
Typical Junction Capacitance(Note 2)	C_J	1.5			pF
Typical Thermal Resistance	$R_{\theta JA}$	357			°C/W
Operating and Storage Temperature Range	T_J,T_{STG}	-55 to +125			°C

Note: 1. Test Conditions: I_F=I_R=10mA, R_L=100Ω, V_R=6V to I_{RR}=1mA, R_L=100Ω

2. Measured at 1MHz and V_R=0

3. Suffix "M" stands for "DO-34" package.(e.g.: BAV19**M**)

RATING AND CHARACTERISTIC CURVES (BAV19 THRU BAV21)

FIG.1 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

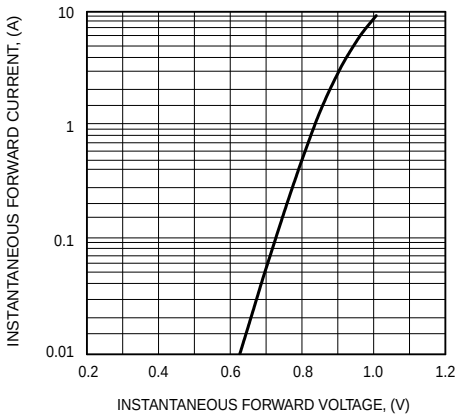


FIG.2 - TYPICAL REVERSE CHARACTERISTICS

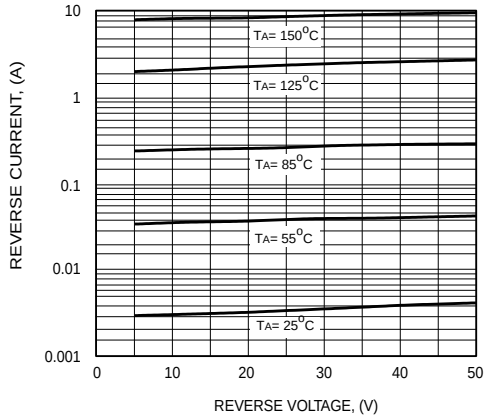


FIG.3 - TYPICAL JUNCTION CAPACITANCE

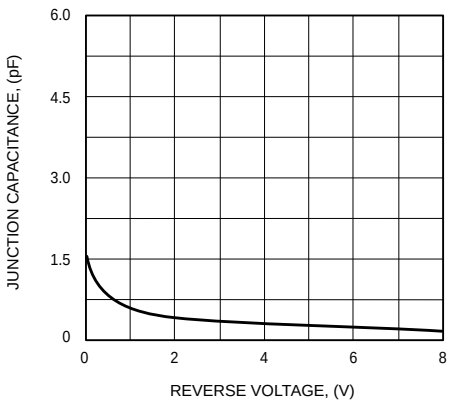
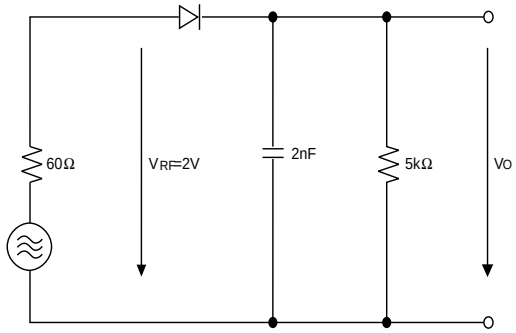


FIG.4 - RECTIFICATION EFFICIENCY MEASUREMENT CIRCUIT



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