

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

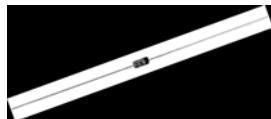
MECHANICAL DATA

- * 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.

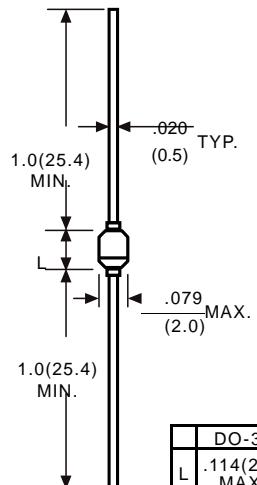
MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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. |

Dimensions in inches and (millimeters)

| | SYMBOL | BAV19 | BAV20 | BAV21 | UNITS |
|---------------------------------------------------------------------------------------------------|---------------------|-------|-------------|-------|-------|
| Maximum Reverse Voltage | VR | 100 | 150 | 200 | V |
| Maximum Recurrent Peak Reverse Voltage | V _{RRM} | 120 | 200 | 250 | V |
| Maximum Average Rectified Current | I _o | | 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 | P _{tot} | | 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) | t _{rr} | | 50 | | nS |
| Typical Junction Capacitance(Note 2) | C _J | | 1.5 | | pF |
| Typical Thermal Resistance | R _{θJA} | | 357 | | °C/W |
| Operating and Storage Temperature Range | T _{J,TSTG} | | -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.: BAV19M)

RATING AND CHARACTERISTIC CURVES (BAV19 THRU BAV21)

FIG.1 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

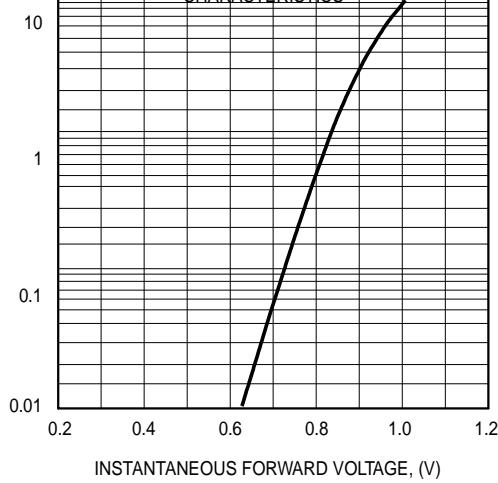


FIG.2 - TYPICAL REVERSE CHARACTERISTICS

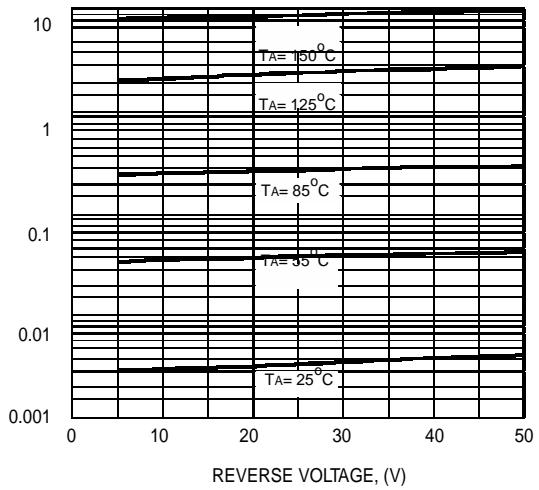


FIG.3 - TYPICAL JUNCTION CAPACITANCE

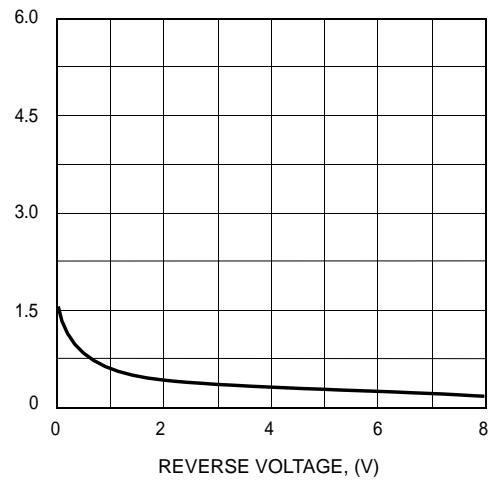


FIG.4 - RECTIFICATION EFFICIENCY MEASUREMENT CIRCUIT

