

BAV19 ~ BAV21

FEATURES :

- switching speed: max. 50 ns
- For general purpose
- This diode is also available in other case styles including: the MiniMELF case with the type designation BAV101 to BAV103, the SOT-23 case with the type designation BAS19 to BAS21

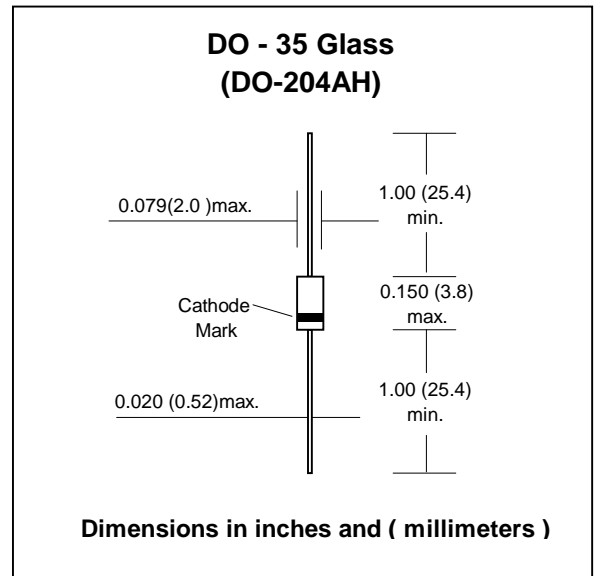
* Pb / RoHS Free

MECHANICAL DATA :

Case: DO-35 Glass Case

Weight: approx. 0.13g

SWITCHING DIODES



Maximum Ratings and Thermal Characteristics (Rating at 25 °C ambient temperature unless otherwise specified.)

| Parameter | Symbol | Value | Unit |
|--|-------------|--------------|------|
| Maximum Repetitive Peak Reverse Voltage | BAV19 | 120 | V |
| | BAV20 | 200 | |
| | BAV21 | 250 | |
| Maximum Continuous Reverse Voltage | BAV19 | 100 | V |
| | BAV20 | 150 | |
| | BAV21 | 200 | |
| Maximum Rectified Current (Average) Half Wave Rectification with Resist. Load | $I_{F(AV)}$ | 200 | mA |
| Maximum Continuous Current ⁽¹⁾ | I_F | 250 | mA |
| Maximum Power Dissipation ⁽¹⁾ | P_D | 500 | mW |
| Maximum Repetitive Peak Forward Current ⁽¹⁾ | I_{FRM} | 625 | mA |
| Maximum Non-repetitive Peak Forward Current at t = 1s | I_{FSM} | 1.0 | A |
| Maximum Junction Temperature ⁽¹⁾ | T_J | 175 | °C |
| Storage Temperature Range ⁽¹⁾ | T_S | -65 to + 175 | °C |

Note : (1) Valid provided that leads are kept at ambient temperature at a distance of 8mm from case.

Electrical Characteristics ($T_J = 25^\circ\text{C}$ unless otherwise noted)

| Parameter | Symbol | Test Condition | Min. | Typ. | Max. | Unit |
|-----------------------|----------|---|------|------|------|------|
| Reverse Current | I_R | $V_R = 100\text{ V}$ | - | - | 100 | nA |
| | | $V_R = 150\text{ V}$ | - | - | 100 | |
| | | $V_R = 200\text{ V}$ | - | - | 100 | |
| Forward Voltage | V_F | $I_F = 100\text{ mA}$ | - | - | 1.0 | V |
| Diode Capacitance | C_d | $f = 1\text{ MHz}; V_R = 0$ | - | 1.5 | - | pF |
| Reverse Recovery Time | T_{rr} | $I_F = 30\text{ mA}, I_R = 30\text{ mA}$ $I_{RR} = 3\text{ mA}, R_L = 100\ \Omega$ | - | - | 50 | ns |

RATING AND CHARACTERISTIC CURVES (BAV19 ~ BAV21)

FIG. 1 ADMISSIBLE FORWARD CURRENT VERSUS AMBIENT TEMPERATURE

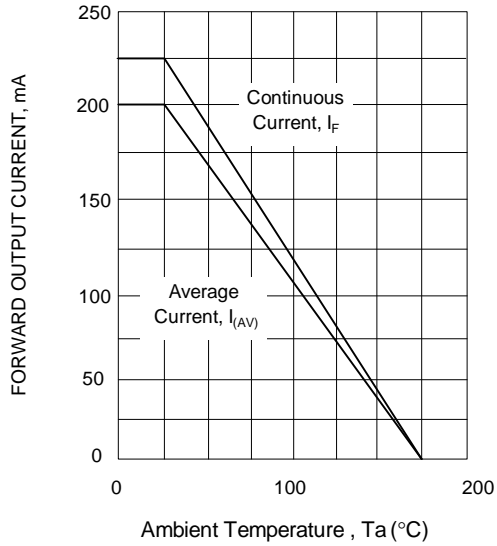


FIG. 2 TYPICAL FORWARD VOLTAGE

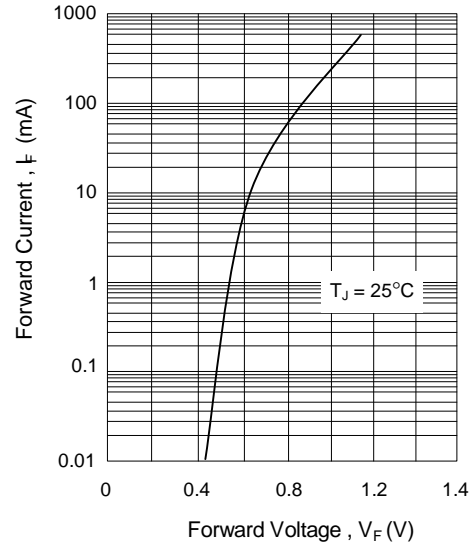


FIG. 3 TYPICAL DIODE CAPACITANCE AS A FUNCTION OF REVERSE VOLTAGE

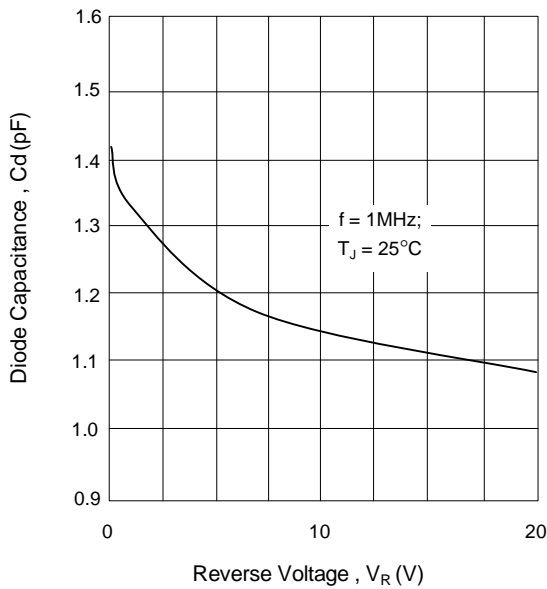


FIG. 4 TYPICAL REVERSE CURRENT VERSUS JUNCTION TEMPERATURE

