

## BAX18

## SWITCHING DIODE

### FEATURES :

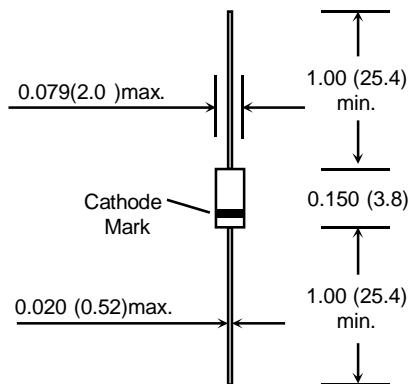
- Switching speed: max. 50 ns
- General application
- Continuous reverse voltage: max. 75 V
- Repetitive peak reverse voltage: max. 75 V
- Repetitive peak forward current: max. 2 A.
- Pb / RoHS Free

### MECHANICAL DATA :

**Case:** DO-35 Glass Case

**Weight:** approx. 0.13g

**DO - 35 Glass  
(DO-204AH)**



Dimensions in inches and ( millimeters )

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

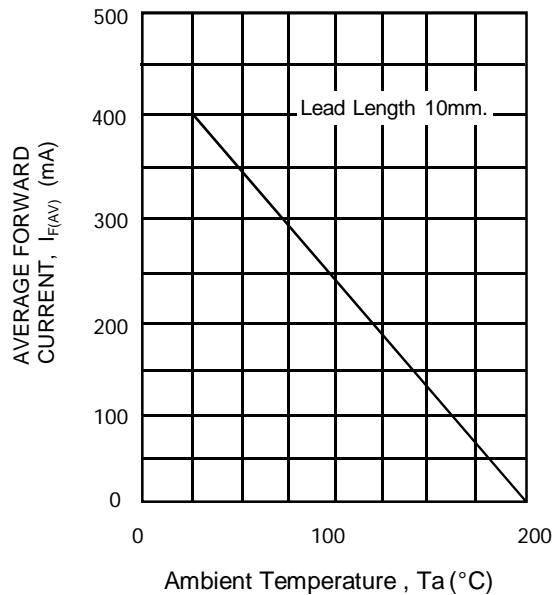
| Parameter   | Symbol      | Value        | Unit |
|---|-------------|--------------|------|
| Maximum Repetitive Peak Reverse Voltage   | $V_{RRM}$   | 75           | V    |
| Maximum Continuous Reverse Voltage  | $V_R$       | 75           | V    |
| Maximum Continuous Forward Current  | $I_F$       | 500          | mA   |
| Maximum Average Forward Current   | $I_{F(AV)}$ | 400          | mA   |
| Maximum Repetitive Peak Forward Current   | $I_{FRM}$   | 2            | A    |
| Maximum Non-repetitive Peak Forward Current at $t = 10\text{ms}$ , $T_j = 25^\circ\text{C}$ | $I_{FSM}$   | 9            | A    |
| Maximum Power Dissipation   | $P_D$       | 450          | mW   |
| Maximum Junction Temperature  | $T_J$       | 200          | °C   |
| Storage Temperature Range   | $T_S$       | -65 to + 200 | °C   |

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

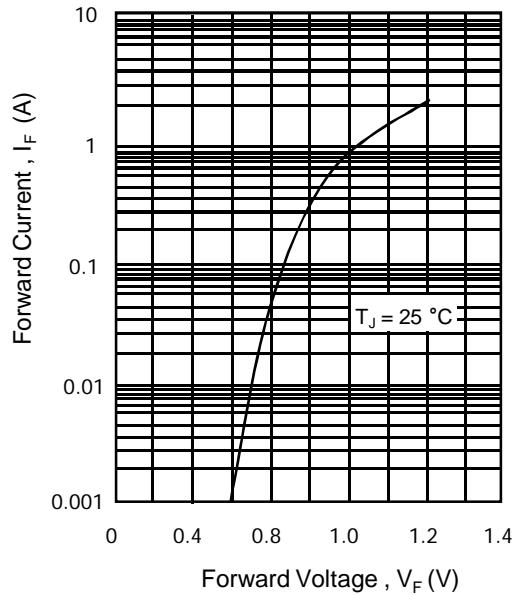
| Parameter             | Symbol   | Test Condition  | Min | Typ | Max      | Unit          |
|-----------------------|----------|---|-----|-----|----------|---------------|
| Reverse Current       | $I_R$    | $V_R = 75\text{ V}$<br>$V_R = 75\text{ V}, T_j = 150^\circ\text{C}$   | -   | -   | 5<br>100 | $\mu\text{A}$ |
| Forward Voltage       | $V_F$    | $I_F = 300\text{ mA}$   | -   | -   | 1.1      | V             |
| Diode Capacitance     | $C_d$    | $f = 1\text{MHz} ; V_R = 0$   | -   | -   | 35       | pF            |
| Reverse Recovery Time | $T_{rr}$ | $I_F = 30\text{mA} , I_R = 30\text{mA}$<br>$I_{RR} = 3\text{mA} , R_L = 100\ \Omega$<br>measured at $I_R = 3\text{ mA}$ | -   | -   | 50       | ns            |

## RATING AND CHARACTERISTIC CURVES ( BAX18 )

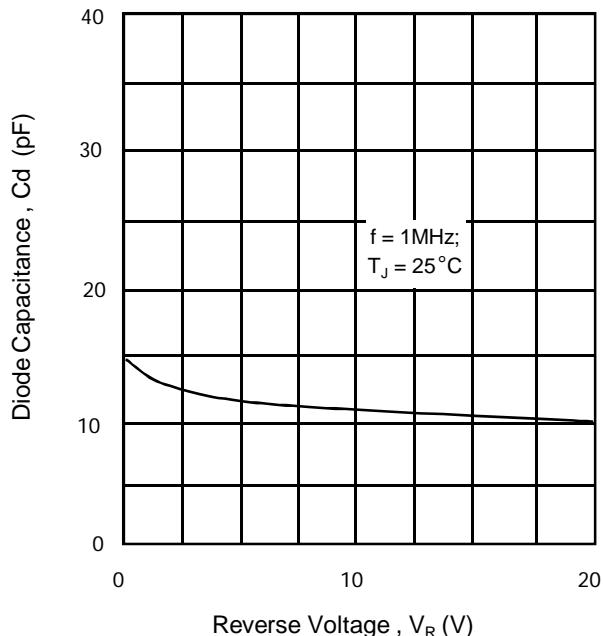
**FIG. 1 MAXIMUM FORWARD CURRENT VERSUS AMBIENT TEMPERATURE.**



**FIG. 2 TYPICAL FORWARD VOLTAGE**



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



**FIG.4 TYPICAL REVERSE CURRENT VS JUNCTION TEMPERATURE**

