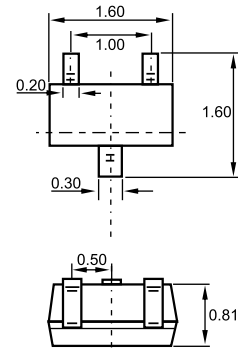
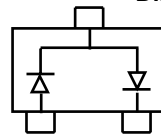
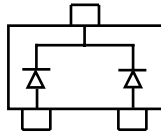
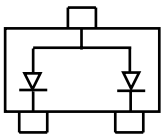




### SOT-523



Dimensions in inches and (millimeters)



BAW56T Marking: JD

BAV70T Marking: JJ

BAV99T Marking: JE

### Maximum Ratings @ $T_A=25^\circ\text{C}$

| Parameter                 | Symbol    | Limits  | Unit             |
|---------------------------|-----------|---------|------------------|
| Reverse voltage           | $V_R$     | 85      | V                |
| Forward current           | $I_o$     | 75      | mA               |
| Forward power dissipation | $P_D$     | 150     | mW               |
| Junction temperature      | $T_j$     | 150     | $^\circ\text{C}$ |
| Storage temperature       | $T_{stg}$ | -65~150 | $^\circ\text{C}$ |

### ELECTRICAL CHARACTERISTICS ( $T_{amb}=25^\circ\text{C}$ unless otherwise specified)

| Parameter                       | Symbol     | Test conditions  | MIN | MAX                        | UNIT          |
|---------------------------------|------------|--|-----|----------------------------|---------------|
| Reverse breakdown voltage       | $V_{(BR)}$ | $I_R=1\mu\text{A}$   | 85  |                            | V             |
| Reverse voltage leakage current | $I_{R1}$   | $V_R=75\text{V}$   |     | 2                          | $\mu\text{A}$ |
|                                 | $I_{R2}$   | $V_R=25\text{V}$   |     | 0.03                       | $\mu\text{A}$ |
| Forward voltage                 | $V_F$      | $I_F=1\text{mA}$<br>$I_F=10\text{mA}$<br>$I_F=50\text{mA}$<br>$I_F=150\text{mA}$ |     | 715<br>855<br>1000<br>1250 | mV            |
| Diode capacitance               | $C_D$      | $V_R=0$ $f=1\text{MHz}$  |     | 1.5                        | pF            |
| Reverse recovery time           | $t_{rr}$   | $I_F=I_R=10\text{mA}$<br>$I_{tr}=0.1\times I_R, R_L=100\Omega$                   |     | 4                          | nS            |

## Typical Characteristics

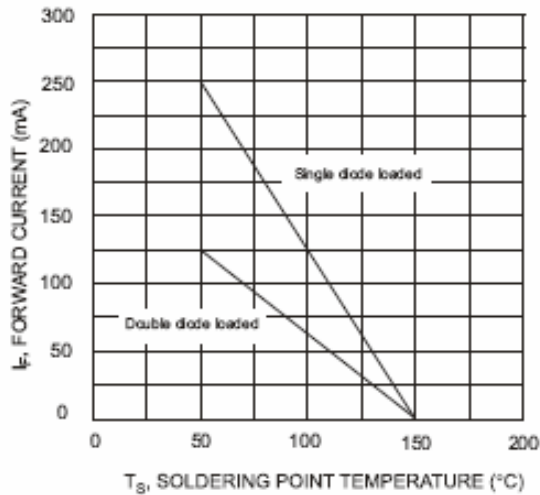


Fig. 1 Current Derating Curve

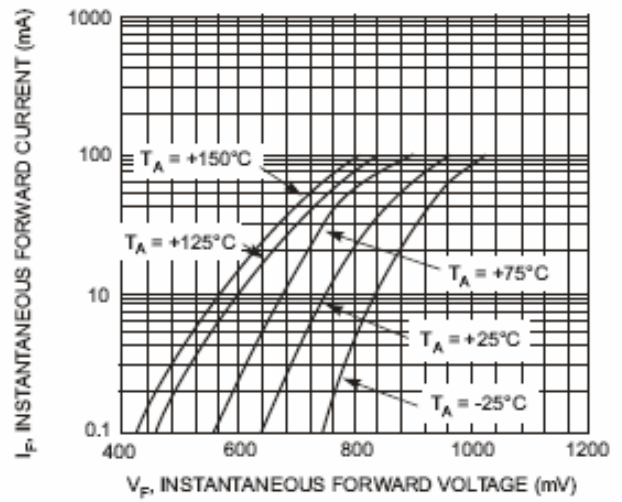


Fig. 2, Typical Forward Characteristics

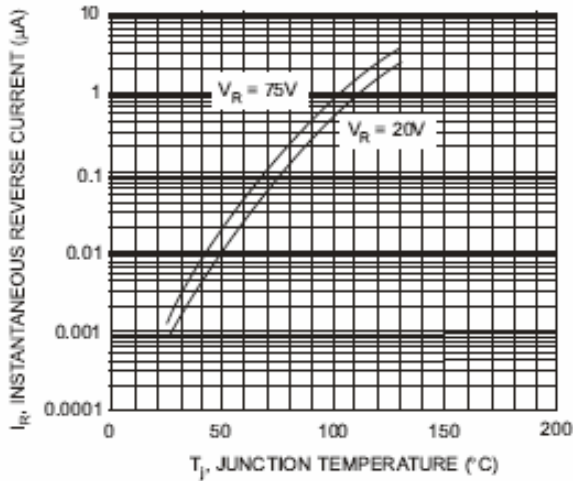


Fig. 3, Typical Reverse Characteristics