



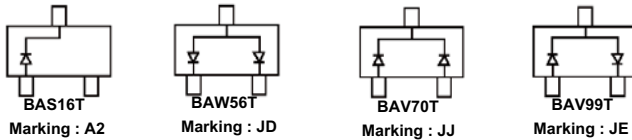
Micro Commercial Components

Micro Commercial Components  
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**BAS16T**  
**BAW56T**  
**BAV70T**  
**BAV99T**

## Features

- Ultra-Small Surface Mount Package
- For General Purpose Switching Applications
- High Conductance
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0 and MSL Rating 1

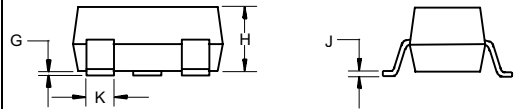
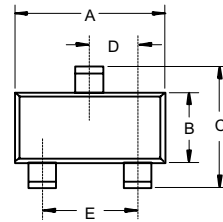


**150mW 85Volt  
Switching Diode**

## Maximum Ratings

- Operating Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +150°C

**SOT-523**



## Electrical Characteristics @ 25°C Unless Otherwise Specified

|   |           |                           |  |
|---|-----------|---------------------------|--|
| Peak Repetitive Reverse Voltage                         | $V_{RRM}$ | 85V                       |  |
| Continuous Forward Current                              | $I_F$     | 75mA                      |  |
| Power Dissipation                                       | $P_D$     | 150mW                     |  |
| Peak Forward Surge Current @t=1.0us                     | $I_{FSM}$ | 4.0A                      |  |
| @t=1.0ms  |           | 1.0A                      |  |
| @t=1.0s   |           | 0.5A                      |  |
| Maximum Instantaneous Forward Voltage                   | $V_F$     | 715mV                     | $I_F = 1mA$  |
|   |           | 855mV                     | $I_F = 10mA;$  |
|   |           | 1000mV                    | $I_F = 50mA$   |
|   |           | 1250mV                    | $I_F = 150mA$  |
| Maximum DC Reverse Current At Rated DC Blocking Voltage | $I_R$     | 2 $\mu$ A<br>0.03 $\mu$ A | $V_R=75Volts$<br>$V_R=25Volts$   |
| Typical Total Capacitance                               | $C_T$     | 1.5pF                     | Measured at 1.0MHz, $V_R=0V$   |
| Reverse Recovery Time                                   | $T_{rr}$  | 4nS                       | $I_F = I_R = 10mA,$<br>$I_{rr} = 0.1 \times I_R,$<br>$R_L = 100\Omega$ |

| DIM | INCHES       |      | MM          |      | NOTE |
|-----|--------------|------|-------------|------|------|
|     | MIN          | MAX  | MIN         | MAX  |      |
| A   | .059         | .067 | 1.50        | 1.70 |      |
| B   | .030         | .033 | 0.75        | 0.85 |      |
| C   | .057         | .069 | 1.45        | 1.75 |      |
| D   | .020 Nominal |      | 0.50Nominal |      |      |
| E   | .035         | .043 | 0.90        | 1.10 |      |
| G   | .000         | .004 | .000        | .100 |      |
| H   | .028         | .031 | .70         | 0.80 |      |
| J   | .004         | .008 | .100        | .200 |      |
| K   | .010         | .014 | .25         | .35  |      |

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**BAV70T/BAV99T**

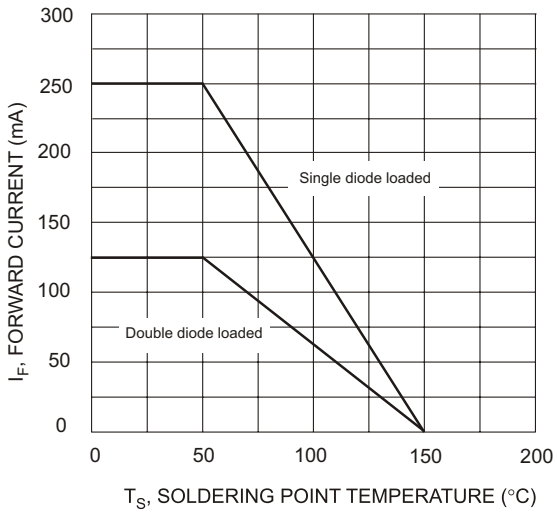


Fig. 1 Current Derating Curve

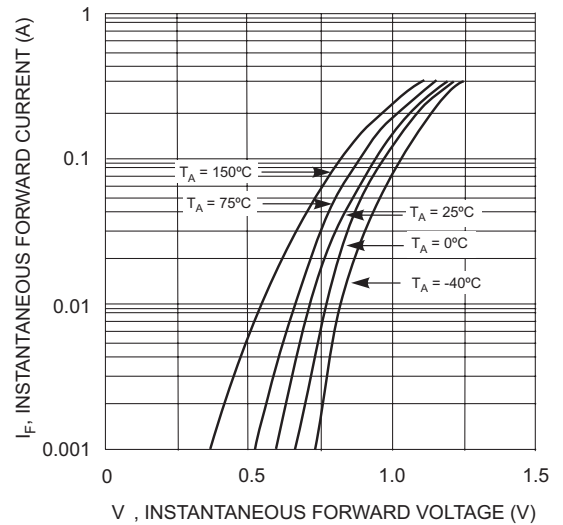


Fig. 2 Forward Characteristics

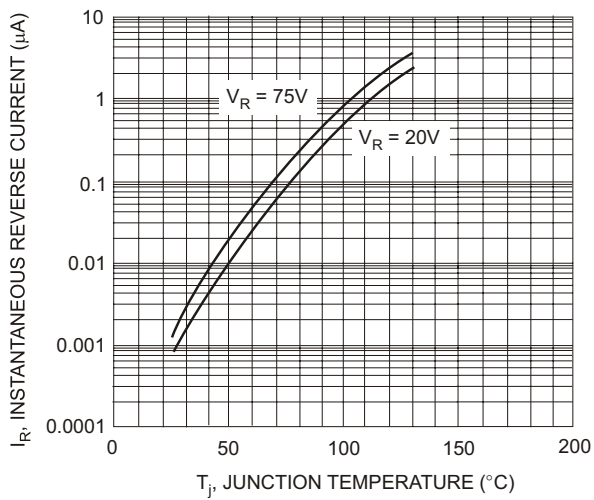


Fig. 3, Typical Reverse Characteristics



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## Ordering Information

| Device           | Packing              |
|------------------|----------------------|
| (Part Number)-TP | Tape&Reel;3Kpcs/Reel |

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