# **BAV16WS**

### **Fast Switching Diode**

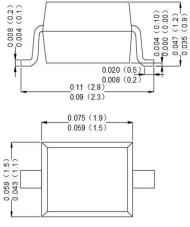
0.016 (0.4)\_ 0.010 (0.2)

#### **Features**

- · Fast Switching Speed
- Surface Mount Package Ideally Suited for Automatic Insertion
- For General Purpose Switching Applications
- High Conductance

### **Mechanical Data**

- Case:Molded Plastic,SOD-323
- Epoxy:UL 94V-0 rate flame retardant
- Terminals:Plated Leads Solderable per MIL-STD-750,Method-2026
- Mounting Position : Any.
- Marking: T6



Dimensions in inches and (millimeters)

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

| Parameter  | Symbol                | Limit    | Unit |
|--|-----------------------|----------|------|
| Non-Repetitive Peak Reverse Voltage                | V <sub>RM</sub>       | 100      | V    |
| Peak Repetitive Peak Reverse Voltage               | V <sub>RRM</sub>      |          |      |
| Working Peak Reverse Voltage                       | V <sub>RWM</sub>      | 100      | V    |
| DC Blocking Voltage                                | V <sub>R</sub>        |          |      |
| RMS Reverse Voltage                                | $V_{R(RMS)}$          | 71       | V    |
| Forward Continuous Current                         | I <sub>FM</sub>       | 300      | mA   |
| Average Rectified Output Current                   | lo                    | 150      | mA   |
| Non-Repetitive Peak Forward Surge Current @t=8.3ms | I <sub>FSM</sub>      | 2.0      | А    |
| Power Dissipation BAV16WS                          | Pd                    | 400      | mW   |
| Thermal Resistance from Junction to Ambient        | $R_{	extsf{	heta}JA}$ | 312      | °C/W |
| Junction Temperature                               | Tj                    | 150      | °C   |
| Storage Temperature                                | T <sub>STG</sub>      | -55~+150 | °C   |

SOD-323

(0.10) (0.00) (1.2) (0.9)



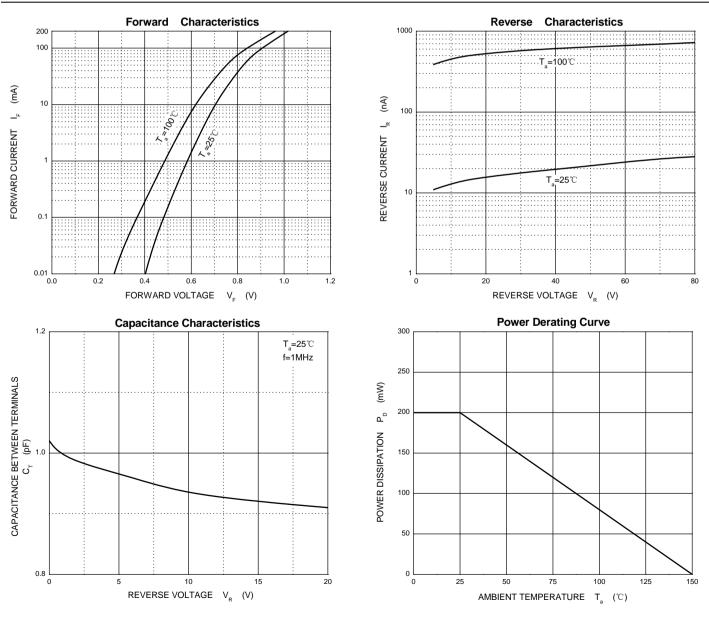
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### Electrical Characteristics (Rating at 25°C ambient temperature unless otherwise specified.)

| Parameter                     | Symbol          | Min | Тур | Max   | Unit | Conditions                           |
|-------------------------------|-----------------|-----|-----|-------|------|--------------------------------------|
| Forward voltage               | V <sub>F1</sub> |     |     | 0.715 | V    | I <sub>F</sub> =1mA                  |
|                               | V <sub>F2</sub> |     |     | 0.855 | V    | I <sub>F</sub> =10mA                 |
|                               | V <sub>F3</sub> |     |     | 1.0   | V    | I <sub>F</sub> =50mA                 |
|                               | V <sub>F4</sub> |     |     | 1.25  | V    | I <sub>F</sub> =150mA                |
| Reverse current               | I <sub>R1</sub> |     |     | 1     | μA   | V <sub>R</sub> =75V                  |
|                               | I <sub>R2</sub> |     |     | 25    | nA   | V <sub>R</sub> =20V                  |
| Capacitance between terminals | CT              |     |     | 2     | pF   | V <sub>R</sub> =0V,f=1MHz            |
| Reverse recovery time         | t <sub>rr</sub> |     |     | 4     | ns   | I <sub>F</sub> =I <sub>R</sub> =10mA |
|                               | ι <sub>rr</sub> |     |     |       |      | $Irr=0.1XI_R, R_L=100\Omega$         |

## **Rating And Characteristic Curves**



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