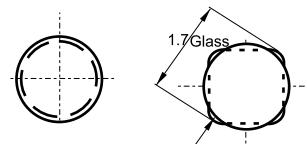
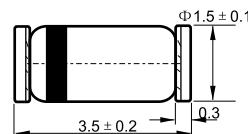




### **MINI MELF**



Dimension in millimeters

### **Features**

- ◊ High Voltage Switching Device
- ◊ Mini Melf package
- ◊ Surface device type mounting
- ◊ Hermetically sealed glass
- ◊ Compression bonded construction
- ◊ All external surface are corrosion resistant and leads are readily solderable
- ◊ RoHS compliant
- ◊ Matte Tin (Sn) lead finish
- ◊ Color band indicates Negative Polarity

### **Maximum Ratings and Electrical Characteristics**

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60 Hz, resistive or inductive load.

For capacitive load, derate current by 20%

#### **Maximum Ratings**

| Type Number  | Symbol                            | Value        | Units |
|--|-----------------------------------|--------------|-------|
| Repetitive Peak Reverse Voltage  | V <sub>RRM</sub>                  | 250          | V     |
| Average Rectified Forward Current  | I <sub>F(AV)</sub>                | 200          | mA    |
| Non-Repetitive Peak Forward Surge Current<br>Pulse Width = 1.0 Second<br>Pulse Width = 1.0 usecond | I <sub>FSM</sub>                  | 1.0<br>4.0   | A     |
| Power Dissipation  | P <sub>d</sub>                    | 500          | mW    |
| Operating and Storage Temperature Range  | T <sub>J</sub> , T <sub>STG</sub> | -65 to + 200 | °C    |

#### **Electrical Characteristics**

| Type Number  | Symbol           | Min | Max | Units |
|--|------------------|-----|-----|-------|
| Breakdown Voltage<br>BAV100<br>BAV101<br>BAV102<br>BAV103    | B <sub>V</sub>   | 60  |     | V     |
|  |                  | 120 |     |       |
|  |                  | 200 |     |       |
|  |                  | 250 |     |       |
| Forward Voltage IF= 100mA                                    | V <sub>F</sub>   |     | 1.0 | V     |
| Peak Reverse Current<br>BAV100<br>BAV101<br>BAV102<br>BAV103 | IR               |     | 100 | nA    |
|  |                  |     | 100 |       |
|  |                  |     | 100 |       |
|  |                  |     | 100 |       |
| Thermal Resistance, Junction to Ambient                      | R <sub>θJA</sub> |     | 350 | °C/W  |
| Junction Capacitance VR=0, f=1.0MHz                          | C <sub>j</sub>   | -   | 5.0 | pF    |
| Reverse Recovery Time (Note)                                 | trr              | -   | 50  | nS    |

Notes: Reverse Recovery Test Conditions: IF=IR=30mA, Irr=3mA, RL=100Ω.

## RATINGS AND CHARACTERISTIC CURVES (BAV100/101/102/103)

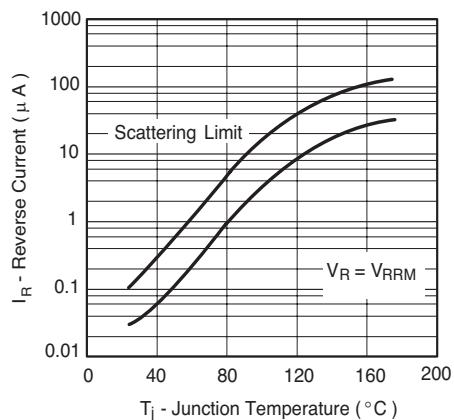


Fig. 1 Reverse Current vs. Junction Temperature

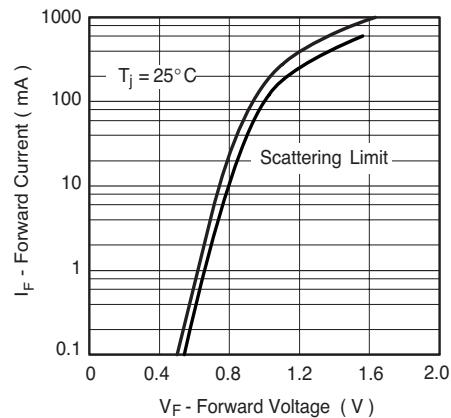


Fig. 2 Forward Current vs. Forward Voltage

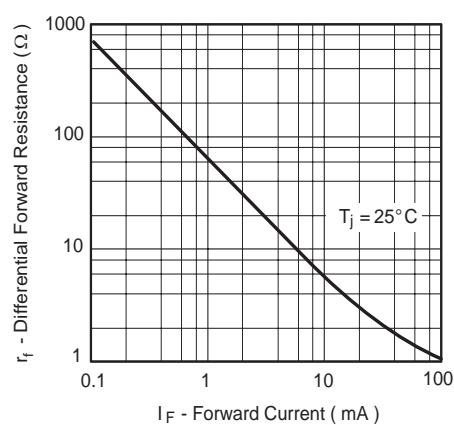


Fig. 3 Differential Forward Resistance vs. Forward Current