

DATA SHEET

BAV101~BAV103

HIGH VOLTAGE SURFACE MOUNT SWITCHING DIODES

VOLTAGE 120 to 250 Volts **POWER** 300 mWatts **MINI-MELF/LL-34** Unit : inch (mm)

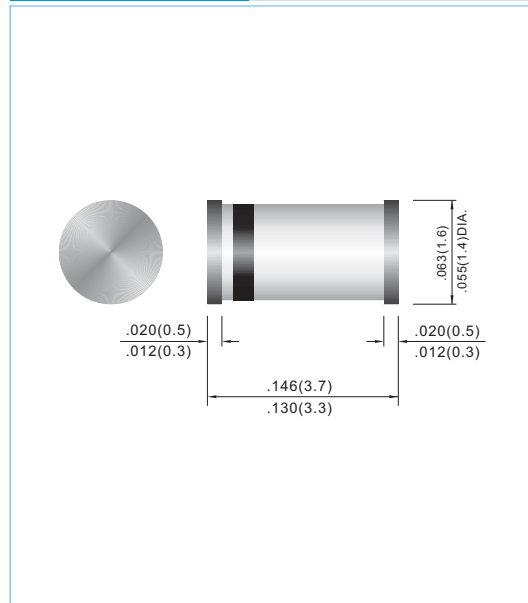
FEATURES

- Fast switching Speed.
- Surface Mount Package Ideally Suited For Automatic Insertion.
- Silicon Epitaxial Planar Construction.
- Both normal and Pb free product are available :
Normal : 80~95% Sn, 5~20% Pb
Pb free: 98.5% Sn above

MECHANICAL DATA

- Case: Mini Melf, Glass
- Terminals: Solderable per MIL-STD-202E, Method 208
- Polarity: Cathode Band
- Marking: Cathode Band Only
- Weight: 0.03 grams
- Packing information

T/R - 2.5K per 7" plastic Reel



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T_J=25°C unless otherwise noted)

| PARAMETER | SYMBOL | BAV101 | BAV102 | BAV103 | UNITS |
|---|------------------|--------|-------------|--------|--------|
| Reverse Voltage | V _R | 100 | 150 | 200 | V |
| Peak Reverse Voltage | V _{RM} | 120 | 200 | 250 | V |
| Rectified Current (Average), Half Wave Rectification with Resistive Load and f >= 50 Hz | I _D | | 200 | | mA |
| Peak Forward Surge Current, t=1.0s | I _{FSM} | | 1.0 | | A |
| Power Dissipation Derate Above at 25°C | P _D | | 300 | | mW |
| Maximum Forward Voltage, I _F = 100mA | V _F | | 1.0 | | V |
| Maximum DC Reverse Current at Rated DC Blocking Voltage T _J = 25°C | I _R | | 0.1 | | uA |
| Typical Junction Capacitance (Note 1) | C _J | | 0.95 | | pF |
| Maximum Reverse Recovery (Note 2) | T _{RR} | | 75 | | ns |
| Maximum Thermal Resistance | R _{θJA} | | 350 | | °C / W |
| Operation Junction Storage Temperature Range | T _{STG} | | -65 TO +175 | | °C |

NOTE:

1. C_J at V_R=0, f=1MHZ
2. From I_F=10mA to I_R=-1mA, V_R=6Volts, R_L=100Ω

RATING AND CHARACTERISTIC CURVES

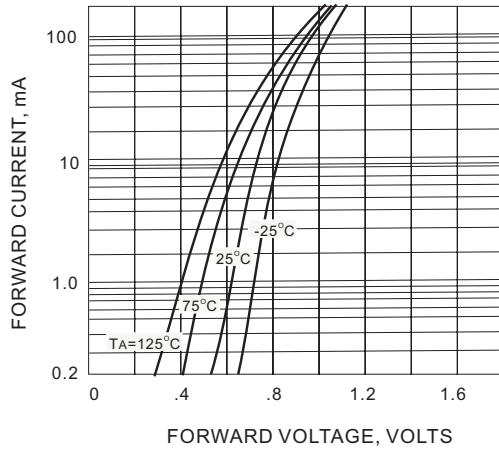


Fig.1 FORWARD CHARACTERISTICS

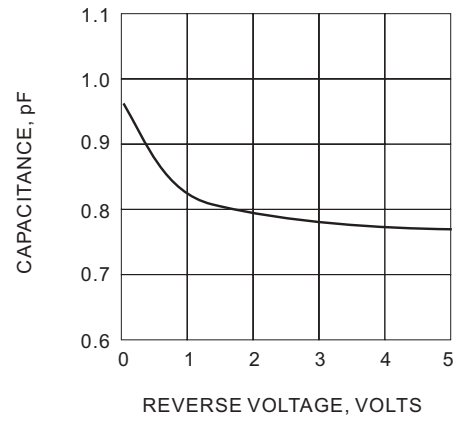


Fig.2 TYPICAL CAPACITANCE vs REVERSE VOLTAGE

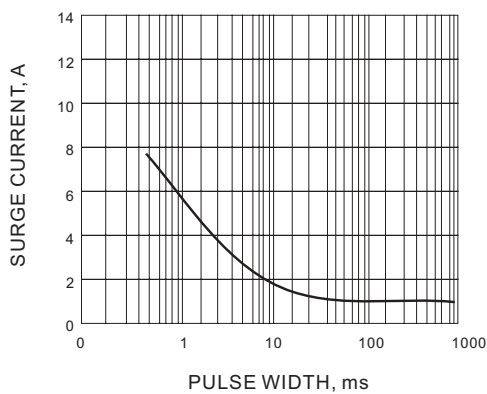


Fig.3 SURGE CURRENT CHARACTERISTIC