

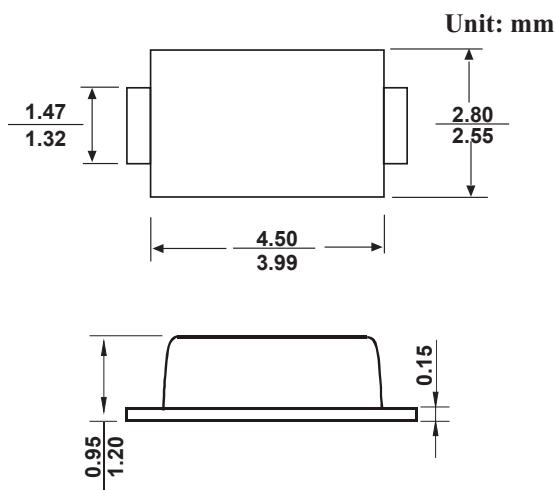
SMAF SCHOTTKY BARRIER DIODE

FEATURES

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- Construction utilizes void-free molded plastic technique
- High reliability
- High temperature soldering guaranteed: 260 °C/10 seconds at terminals
- Component in accordance to RoHS 2015/863 and WEEE 2012/19/EU

MECHANICAL DATA

- Case style: SMAF molded plastic
- Mounting position: Any



MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)

| Characteristic | Symbol | SS22F | SS23F | SS24F | SS245F | Units |
|--|--------------------|-------|-----------------|-------|--------|-------|
| Peak repetitive reverse voltage | V _{RRM} | 20 | 30 | 40 | 45 | V |
| RMS reverse voltage | V _{RMS} | 14 | 21 | 28 | 31.5 | V |
| DC blocking voltage | V _{DC} | 20 | 30 | 40 | 45 | V |
| Maximum average forward output current | I _{F(AV)} | | 2.0 | | | A |
| Peak forward surge current, 8.3ms single half-sine-wave | I _{FSM} | | 50 | | | A |
| Typical thermal resistance (Note 1) | R _{θJA} | | 78 | | | |
| | R _{θJC} | | 18 | | | °C /W |
| | R _{θ JL} | | 20 | | | |
| Operating junction temperature range | T _J | | - 55 ---- + 125 | | | °C |
| Storage temperature range | T _{STG} | | - 55 ---- + 150 | | | °C |

| Parameter | Symbol | Test conditions | | Typ. | Max. | Units |
|---------------------------------------|----------------|------------------------|---|----------|-----------|-----------|
| Maximum instantaneous forward voltage | V _F | I _F = 2.0A | @ T _A =25°C | -- | 0.5 | V |
| Maximum Reverse current | I _R | Rated V _R , | @ T _J =25°C @ T _J =100°C | -- -- | 500 20 | μ A mA |

RATINGS AND CHARACTERISTIC CURVES

Fig.1-Forward Current Derating Curve

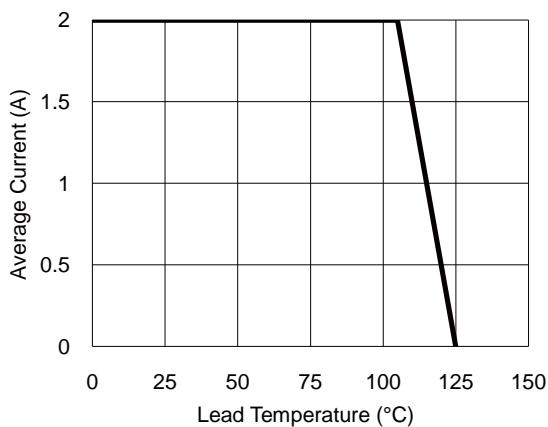


Fig.2- Surge Current Derating Curve

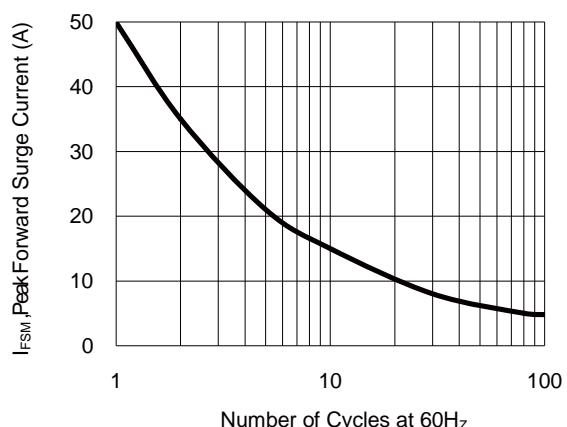


Fig.3- Typical Forward Voltage Characteristic

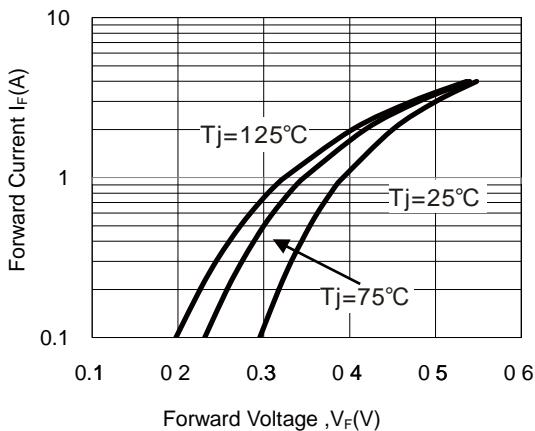


Fig.4- Typical Reverse Characteristic

