

SCHOTTKY BARRIER RECTIFIER

FEATURES

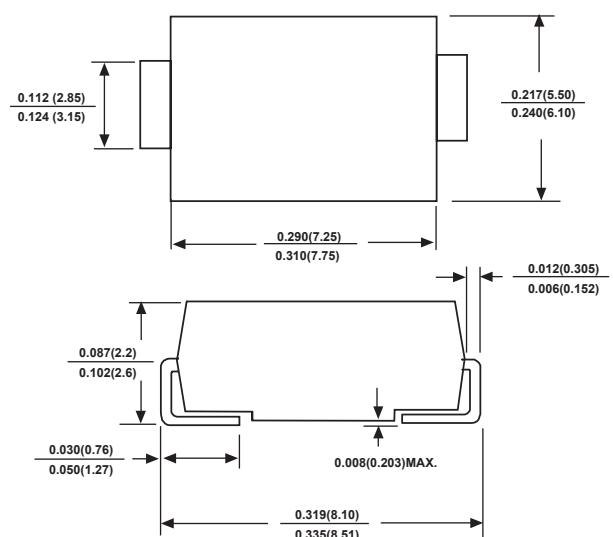
- Plastic package has Underwriters Laboratory Flammability Classification 94V-O Utilizing
- Metal silicon junction ,majority carrier conduction
- Built-in strain relief
- For surface mounted applications
- Low power loss ,high efficiency,High surge capability
- High current capability ,Low forward voltage drop
- For use in low voltage ,high frequency inverters, free wheeling , and polarity protection applications
- High temperature soldering guaranteed:260 °C/10 seconds at terminals
- Component in accordance to RoHS 2002/95/Ec and WEEE 2002/96/EC

MECHANICAL DATA

- Case: SMC molded plastic body
- Terminals:Lead solderable per MIL-STD-750,method 2026
- Polarity:Color band denotes cathode end

VOLTAGE RANGE: 20--- 200 V CURRENT: 3.0 A

SMC



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)Single phase,half wave,60 Hz,resistive or inductive load.

For capacitive load,derate by 20%.

| TYPE NUMBER | SYMBOL | SS32 | SS33 | SS34 | SS35 | SS36 | SS38 | SS310 | SS315 | SS320 | UNITS | | | | | | |
|---|--|---------------------|------|------|------|------|------|-------|-------|-------|-------|--|--|--|--|--|--|
| Maximum recurrent peak reverse voltage | V_{RRM} | 20 | 30 | 40 | 50 | 60 | 80 | 100 | 150 | 200 | V | | | | | | |
| Maximum RMS voltage | V_{RMS} | 14 | 21 | 28 | 42 | 56 | 63 | 70 | 105 | 140 | V | | | | | | |
| Maximum DC blocking voltage | V_{DC} | 20 | 30 | 40 | 50 | 60 | 80 | 100 | 150 | 200 | V | | | | | | |
| Maximum Average Forward rectified Current0.375"(9.5mm) lead length | $I_{F(AV)}$ | 3.0 | | | | | | | | | A | | | | | | |
| Peak forward surge current 8.3ms single half sine-wave superimposed on rated load | I_{FSM} | 100.0 | | | | | | | | | A | | | | | | |
| Maximum instantaneous forward voltage at 3.0 A(Note1) | V_F | 0.50 | | 0.75 | | 0.85 | | 0.90 | | V | | | | | | | |
| Maximum reverse current at rated DC blocking voltage per diode | I_R @ $T_A=25^\circ C$ @ $T_A=100^\circ C$ | 0.5 20.0 10.0 | | | | | | | | | mA | | | | | | |
| Typical Thermal Resistance (Note 2) | $R_{\theta JA}$ | 17.0 | | | | | | | | | °C/W | | | | | | |
| Storage Temperature | T_{STG} | - 55 ---- + 150 | | | | | | | | | °C | | | | | | |
| Operation Junction Temperature | T_j | - 55 ---- + 125 | | | | | | | | | °C | | | | | | |

NOTE: 1.Measured at 1MHz and applied reverse voltage of 4.0V D.C.

2.P.C.B. mounted with 0.2x0.2"(5.0x5.0mm) copper pad areas



RATINGS AND CHARACTERISTIC CURVES

FIG. 1- FORWARD CURRENT DERATING CURVE

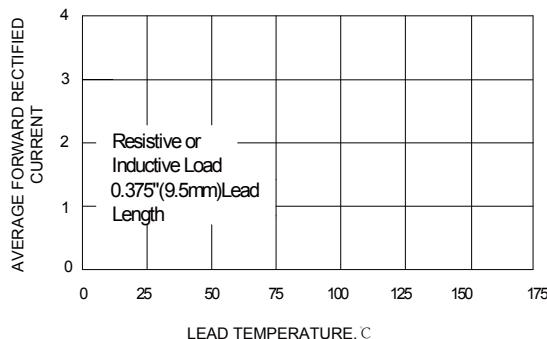


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

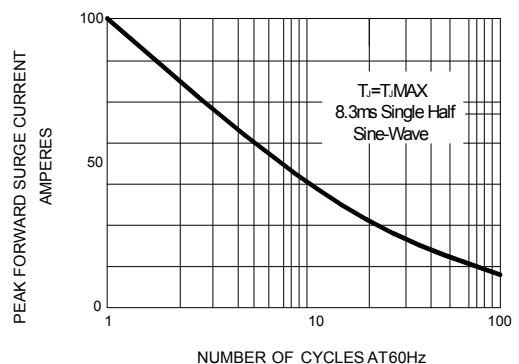


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

