

S32BF THRU S320BF

3.0AMPS. SCHOTTKY BARRIER RECTIFIERS

FEATURE

- . For surface mounted application
- . High current capability
- . Low forward voltage drop
- . Low power loss, high efficiency
- . High surge current capability
- . High temperature soldering guaranteed:

260°C/10 seconds at terminals.

MECHANICAL DATA

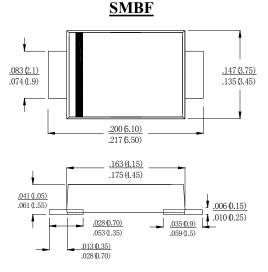
. Terminal: Solder plated

. Case: Molded with UL-94 Class V-0 recognized

Flame Retardant Epoxy

. Polarity: color band denotes cathode

. Packaging: 12mm tape per EIA STD RS-481



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

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

For capacitive load, derate current by 20%

| Type Number | SYMBOL | S32BF | S34BF | S36BF | S310BF | S315BF | S320BF | units |
|--|---|-------------------------|-------|-------|-----------|--------|--------|-------|
| Maximum Recurrent Peak Reverse Voltage | $V_{ m RRM}$ | 20 | 40 | 60 | 100 | 150 | 200 | V |
| Maximum RMS Voltage | $V_{ m RMS}$ | 14 | 28 | 42 | 70 | 105 | 140 | V |
| Maximum DC blocking Voltage | V _{DC} | 20 | 40 | 60 | 100 | 150 | 200 | V |
| Maximum Average Forward Rectified Current at T_L =90°C | $I_{\mathrm{F(AV)}}$ | 3.0 | | | | | | A |
| Peak Forward Surge Current 8.3ms single half sine- wave superimposed on rated load (JEDEC method) | I_{FSM} | 80.0 | | | | | | A |
| Maximum Forward Voltage at 3.0A DC | V_{F} | 0.45 | 0.55 | 0.70 | 0.85 0.95 | | 95 | V |
| Maximum DC Reverse Current @T _A =25°C at rated DC blocking voltage @T _A =100°C | $I_{ m R}$ | 0.5 40.0 | | | 0.1 | | | mA |
| Typical Junction Capacitance (Note1) | CJ | 300 | | | 72 | | | pF |
| Typical Thermal Resistance (Note 2) | $R_{(\mathrm{JA})}$ $R_{(\mathrm{JL})}$ | 75 22 | | | | | | °C/W |
| Storage Temperature | T _{STG} | -55 to +150 | | | | | | °C |
| Operation Junction Temperature | $T_{ m J}$ | -55 to +125 -55 to +150 | | | | | | °C |

Note:

- 1. Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc
- 2. Thermal Resistance from Junction to Ambient and Lead, Mounted.Measured on P.C. Board with 0.2×0.2"(5.0×5.0mm) Copper Pad Areas.

