# SL34BF

Surface Mount Schottky Barrier Rectifiers

## FEATURES

The plastic package carries Underwriters Laboratory Flammability Classification 94V-0

For surface mounted applications

Ultra fast switching for high efficiency

Low reverse leakage

Built-in strain relief,ideal for automated placement

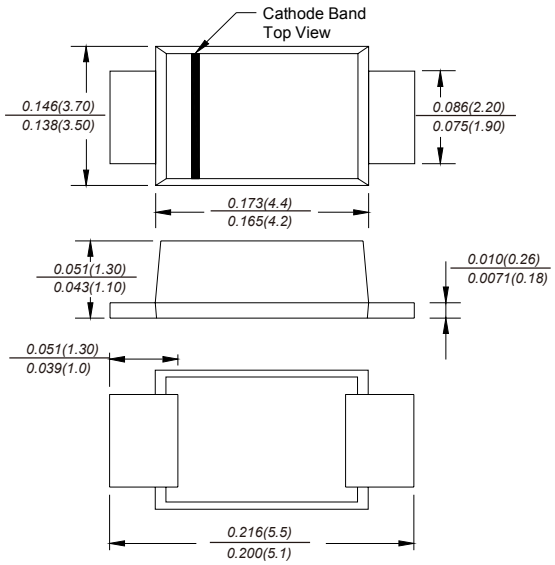
High forward surge current capability

High temperature soldering guaranteed

260°C/10 seconds at terminals

Glass passivated chip junction

**SMBF**




*Dimensions in inches and (millimeters)*

## MECHANICAL DATA

**Case**: SMBF molded plastic body over passivated chip

**Terminals**: Solder plated, solderable per MIL-STD-750, Method 2026

**Polarity**: Color band denotes cathode end

**Mounting Position**: Any

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25℃ ambient temperature unless otherwise specified.
Single phase half-wave 60Hz,resistive or inductive load,for capacitive load current derate by 20%.

| | *SYMBOLS* | SL34BF | UNITS |
|---|---|---|---|
| Maximum repetitive peak reverse voltage | $V_{RRM}$ | 40 | VOLTS |
| Maximum RMS voltage | $V_{RMS}$ | 28 | VOLTS |
| Maximum DC blocking voltage | $V_{DC}$ | 40 | VOLTS |
| Maximum average forward rectified current | $I_{(AV)}$ | 3.0 | Amp |
| Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method) | $I_{FSM}$ | 80.0 | Amps |
| Maximum instantaneous forward voltage at 3.0A | $V_F$ | 0.45 | Volts |
| Maximum DC reverse current $T_A$=25℃ at rated DC blocking voltage $T_A$=100℃ | $I_R$ | 0.3<br>5.0 | mA |
| Typical junction capacitance (NOTE 1) | $C_J$ | 450 | pF |
| Typical thermal resistance (NOTE 2) | $R_{\theta JA}$ | 50.0 | °C/W |
| Operating junction temperature range | $T_J$, | -50 to +150 | °C |
| Storage temperature range | $T_{STG}$ | -50 to +150 | °C |

**Note:**1.Measured at 1MHz and applied reverse voltage of 4.0V D.C.
2.P.C.B. mounted with 0.5x0.5″(12.7x12.7mm) copper pad areas

**Fig.1 Forward Current Derating Curve**

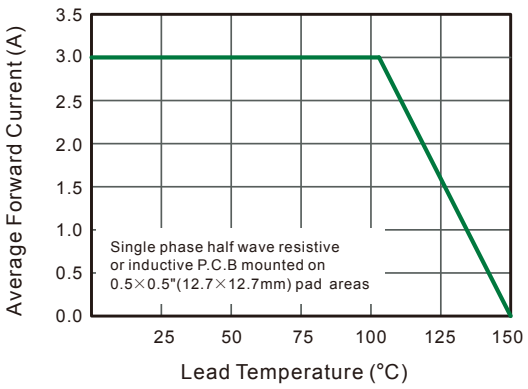



**Fig.2 Typical Reverse Characteristics**

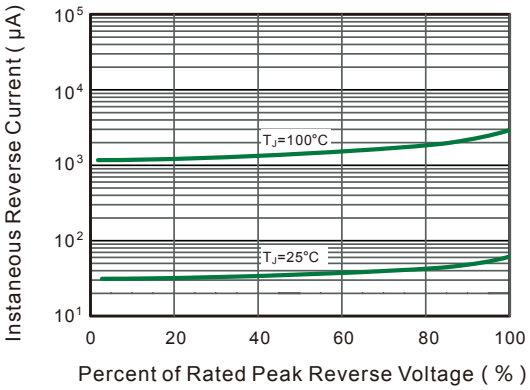



**Fig.3 Typical Forward Characteristic**

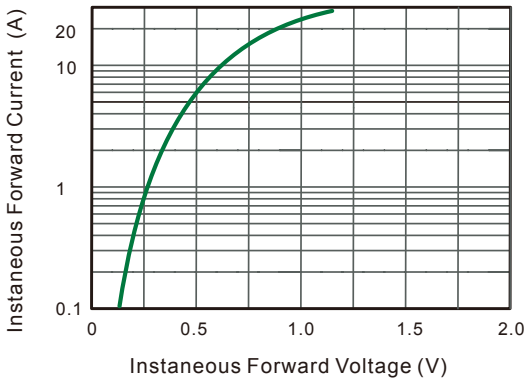



**Fig.4 Typical Junction Capacitance**

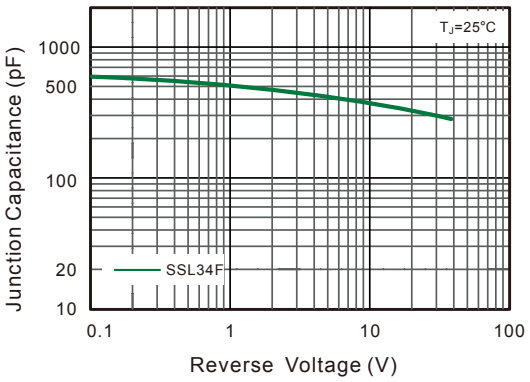



**Fig.5 Maximum Non-Repetitive Peak Forward Surage Current**

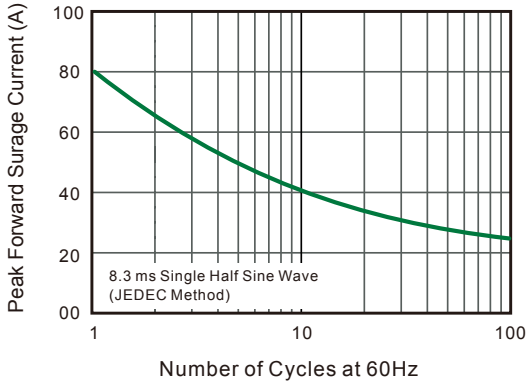



**Fig.6- Typical Transient Thermal Impedance**