

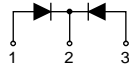
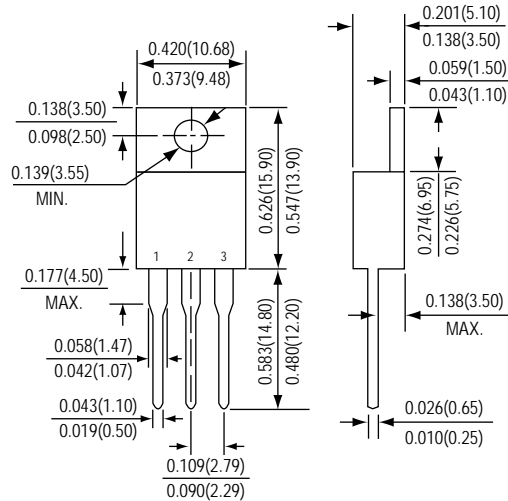


# SBL3040CT THRU SBL3060CT SCHOTTKY BARRIER RECTIFIER

Reverse Voltage - 40 to 60 Volts

Forward Current - 30 Amperes

## TO-220AB



\*Dimensions in inches and (millimeters)



## FEATURES

- \* Lead free product
- \* Low Forward Voltage
- \* Low Switching noise
- \* High Current Capacity
- \* Guard-Ring for Stress Protection
- \* Low Power Loss & High efficiency
- \* Low Stored Charge Majority Carrier Conduction
- \* Plastic Material-UL Recognition Flammability Classification 94V-0

## MECHANICAL DATA

**Case :** JEDEC TO-220AB molded plastic body

**Terminals :** Plated Leads, solderable per MIL-STD-750, Method 2026

**Polarity :** Molded on body

**Mounting Position :** Any

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

| Ratings at 25 °C ambient temperature unless otherwise specified.                                 | SYMBOLS | SBL3040CT   | SBL3045CT | SBL3060CT | UNITS |
|--|---------|-------------|-----------|-----------|-------|
| Maximum repetitive peak reverse voltage  | VRRM    | 40          | 45        | 60        | Volts |
| Maximum RMS voltage  | VRMS    | 28          | 31.5      | 42        | Volts |
| Maximum DC blocking voltage  | VDC     | 40          | 45        | 60        | Volts |
| Maximum average forward rectified current at (See fig. 1)  | I(AV)   | 30          |           |           | Amps  |
| Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method) | IFSM    | 250         |           |           | Amps  |
| Maximum instantaneous forward voltage at IF=15 A   | VF      | 0.55        |           | 0.70      | Volts |
| Maximum DC reverse current at rated DC blocking voltage @Tc=25°C                                 | IR      | 0.20        |           |           | mA    |
| Operating junction temperature range   | TJ      | -55 to +125 |           |           | °C    |
| Storage temperature range  | TJ,TSTG | -55 to +150 |           |           | °C    |

# RATINGS AND CHARACTERISTIC CURVES SBL3040CT THRU SBL3060CT

FIG.1 - FORWARD CURRENT DERATING CURVE

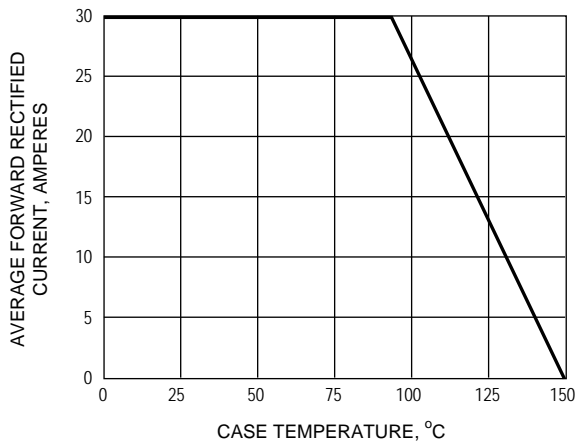


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

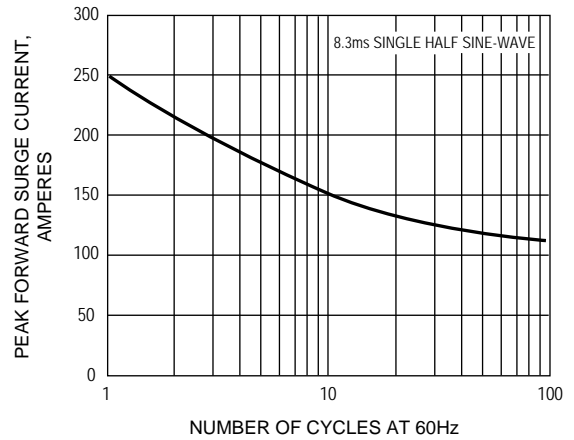


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

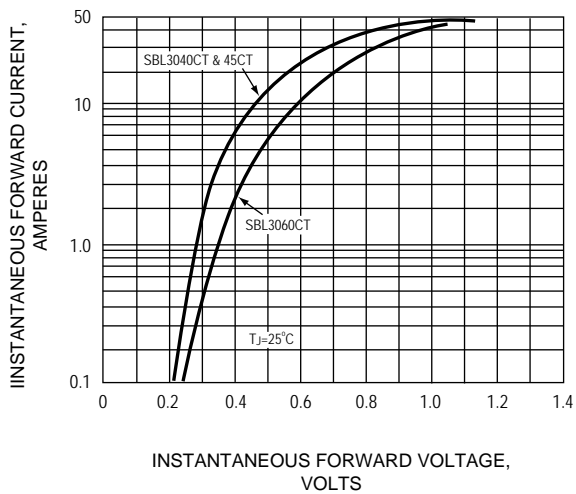


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

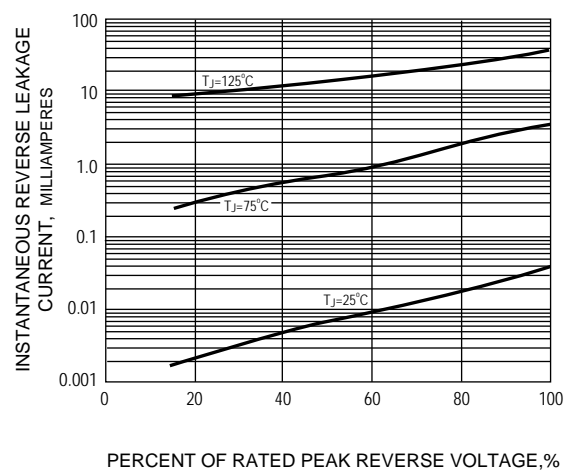


FIG.5 - TYPICAL JUNCTION CAPACITANCE

