



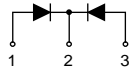
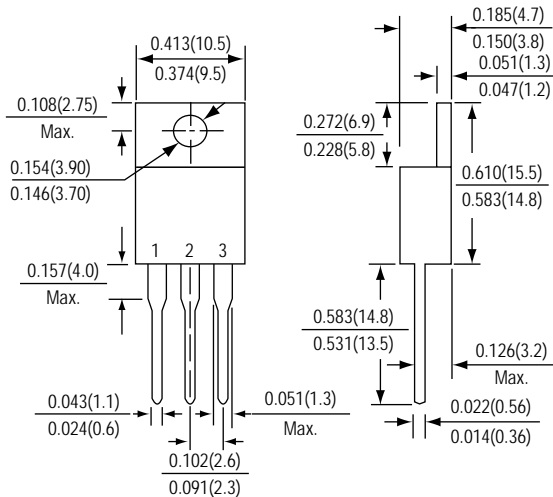
SBL2040CT THRU SBL2060CT

SCHOTTKY BARRIER RECTIFIER

Reverse Voltage - 40 to 60 Volts

Forward Current - 20 Amperes

TO-220AB



*Dimensions in inches and (millimeters)



FEATURES

- * Lead free product
- * Low forward voltage drop
- * High current capacity
- * High reliability
- * High surge current capability
- * Epitaxial construction
- * 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 | SBL2040CT | SBL2045CT | SBL2060CT | UNITS |
|--|---------|-------------|-----------|-----------|-------|
| Maximum repetitive peak reverse voltage | VRRM | 40 | 45 | 60 | Volts |
| Working peak reverse voltage | VRWM | 40 | 45 | 60 | |
| Maximum RMS voltage | VRMS | 28 | 31.5 | 42 | |
| Maximum DC blocking voltage | VDC | 40 | 45 | 60 | |
| Maximum average forward rectified current See Fig. 1 | I (AV) | 20 | | | Amps |
| Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method) | IFSM | 200 | | | Amps |
| Maximum instantaneous forward voltage IF= 10 A, TA=25 | VF | 0.55 | | 0.70 | Volts |
| Maximum DC reverse current at rated DC blocking voltage | IR | 0.20 50 | | | mA |
| Typical junction capacitance (Note 1) | CJ | 650 | | | pF |
| Typical thermal resistance (Note 2) | R JC | 2.5 | | | / W |
| Operating temperature range | TJ | -50 to +150 | | | |
| Storage temperature range | TSTG | -55 to +150 | | | |

Note : 1. Measured at 1.0MHz and applied reverse voltage of 4.0V.
2. Thermal resistance junction to case.

RATINGS AND CHARACTERISTIC CURVES SBL2040CT THRU SBL2060CT

FIG.1 - FORWARD CURRENT DERATING CURVE

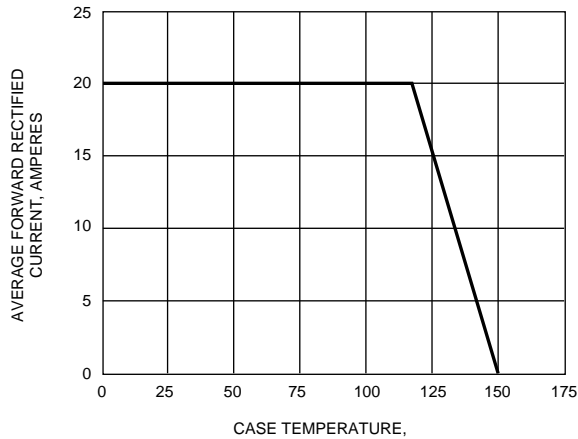


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

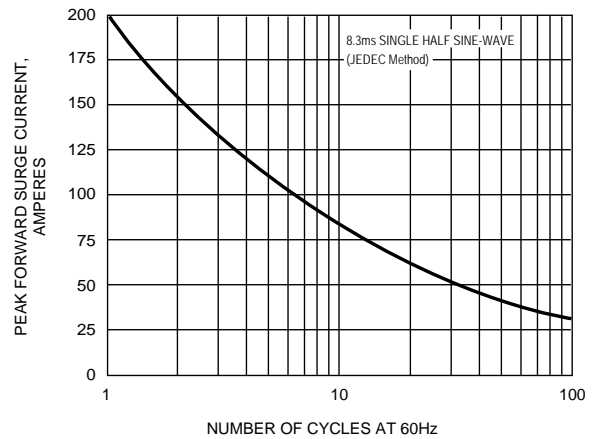


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

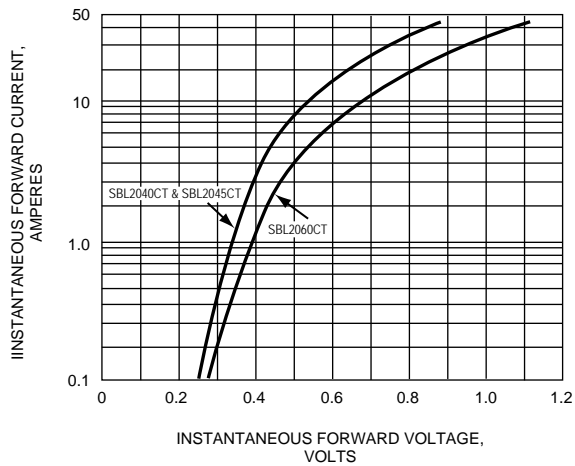


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

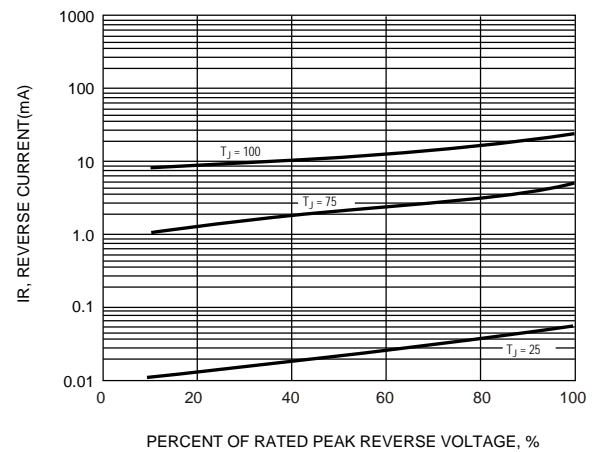


FIG.5 - TYPICAL JUNCTION CAPACITANCE

