

# Schottky Dual Diode

## **SBL25L20CT**

20V / 25A

# DATASHEET

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OEM – General Semiconductor

Source: General Semiconductor Databook 1998

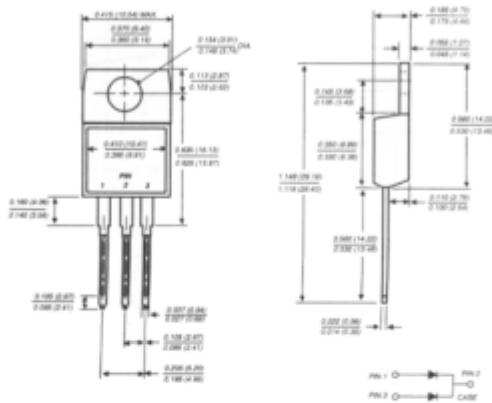
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# SBL25L20CT THRU SBL25L30CT

## LOW V<sub>F</sub> SCHOTTKY RECTIFIER

Reverse Voltage - 20 and 25 Volts Forward Current - 25.0 Amperes

TO-220AB



Dimensions in inches and (millimeters)

### FEATURES

- ◆ Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- ◆ Metal silicon junction, majority carrier conduction
- ◆ Low power loss, high efficiency
- ◆ High current capability
- ◆ Very low forward voltage drop
- ◆ High surge capability
- ◆ Guardring for overvoltage protection
- ◆ For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications
- ◆ High temperature soldering guaranteed: 250°C/10 seconds, 0.25" (6.35mm) from case



### MECHANICAL DATA

**Case:** JEDEC TO-220AB molded plastic body  
**Terminals:** Leads solderable per MIL-STD-750, Method 2026  
**Polarity:** As marked  
**Mounting Position:** Any  
**Mounting Torque:** 5in.-lbs. max.  
**Weight:** 0.08 ounce, 2.24 grams

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

|   | SYMBOLS                           | SBL25L20CT           | SBL25L25CT | SBL25L30CT | UNITS |
|---|-----------------------------------|----------------------|------------|------------|-------|
| Maximum repetitive peak reverse voltage   | V <sub>RRM</sub>                  | 20                   | 25         | 30         | Volts |
| Maximum RMS voltage   | V <sub>RMS</sub>                  | 14                   | 17         | 21         | Volts |
| Maximum DC blocking voltage   | V <sub>DC</sub>                   | 20                   | 25         | 30         | Volts |
| Maximum average forward rectified current at T <sub>C</sub> =95°C   | I <sub>F(AV)</sub>                | 25.0                 |            |            | Amps  |
| Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)   | I <sub>FSM</sub>                  | 180.0                |            |            | Amps  |
| Maximum instantaneous forward voltage per leg at 12.5A (NOTE 1)<br>T <sub>C</sub> =125°C<br>T <sub>C</sub> =25°C  | V <sub>F</sub>                    | 0.39<br>0.49         |            |            | Volts |
| Maximum instantaneous reverse current at rated DC blocking voltage per leg (NOTE 1)<br>T <sub>C</sub> =25°C<br>T <sub>C</sub> =100°C<br>T <sub>C</sub> =125°C | I <sub>R</sub>                    | 1.0<br>50.0<br>100.0 |            |            | mA    |
| Typical thermal resistance per leg (NOTE 2)   | R <sub>θJC</sub>                  | 1.5                  |            |            | °C/W  |
| Operating junction and storage temperature range  | T <sub>J</sub> , T <sub>STG</sub> | -40 to +125          |            |            | °C    |

**NOTES:**

- (1) Pulse test: 300µs pulse width, 1% duty cycle
- (2) Thermal resistance from junction to case per leg

**RATINGS AND CHARACTERISTIC CURVES SBL25L20CT THRU SBL25L30CT**

