

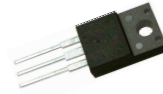


# SBL2040CFSH

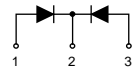
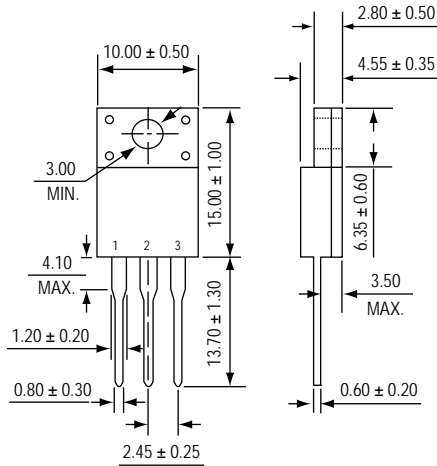
## SCHOTTKY BARRIER RECTIFIER

Reverse Voltage - 40 Volts

Forward Current - 20 Amperes



ITO-220AB



\*Dimensions in millimeters

### FEATURES

- \* Halogen-free type
- \* Compliance to RoHS product
- \* Low power loss & high efficiency
- \* High surge capability
- \* 20 Amperes total (10 Amperes per diode leg)
- \* High surge current capability
- \* Epitaxial construction
- \* Plastic Material-UL Recognition Flammability Classification 94V-0

### MECHANICAL DATA

**Case :** JEDEC ITO-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 | SBL2040CFSH      | UNITS |
|--|---------|------------------|-------|
| Maximum repetitive peak reverse voltage  | VRRM    | 40               | Volts |
| Maximum RMS voltage  | VRMS    | 28               |       |
| Maximum DC blocking voltage  | VDC     | 40               |       |
| Maximum average forward rectified current  | I (AV)  | 20               | Amps  |
| Peak repetitive forward current (rated VR, square wave, 20KHz)                                   | IFM     | 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   | VF      | Tj=25°C<br>0.55  | Volts |
|  |         | Tj=125°C<br>0.50 |       |
| Maximum DC reverse current at rated DC blocking voltage  | IR      | @Tj=25°C<br>0.5  | mA    |
|  |         | @Tj=125°C<br>50  |       |
| Typical junction capacitance (Note)  | CJ      | 400              | pF    |
| Typical thermal resistance   | R JA    | 75               | / W   |
| Operating junction temperature   | TJ      | 125              |       |
| Storage temperature range  | TSTG    | -55 to +150      |       |

Note : Measured at 1.0MHz and applied reverse voltage of 4.0V.

# RATINGS AND CHARACTERISTIC CURVES OF SBL2040CFSH

FIG.1 - FORWARD CURRENT DERATING CURVE

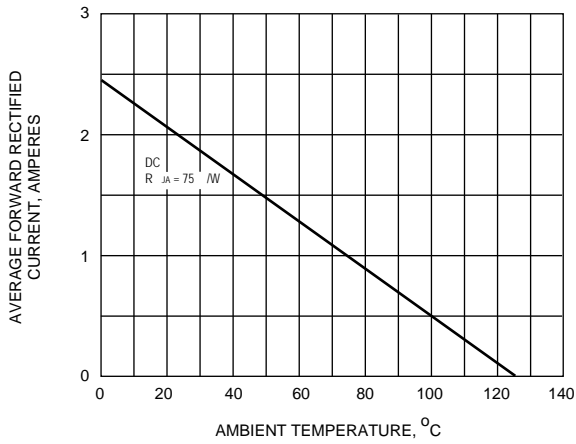


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

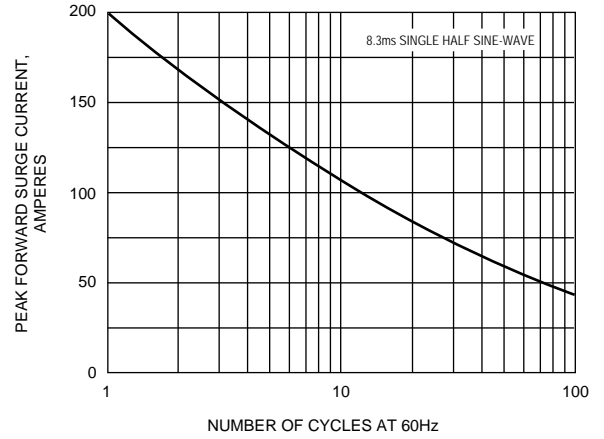


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

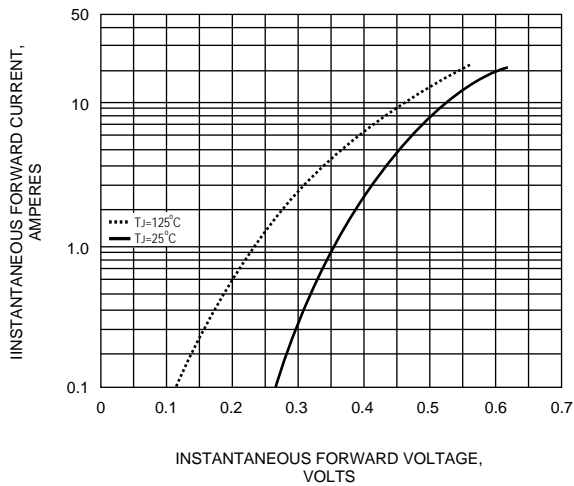


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

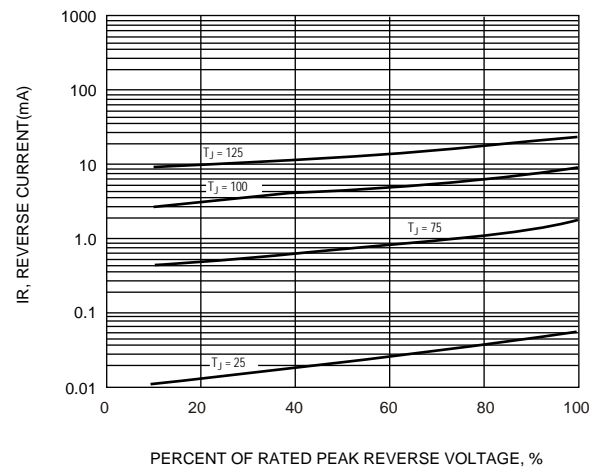
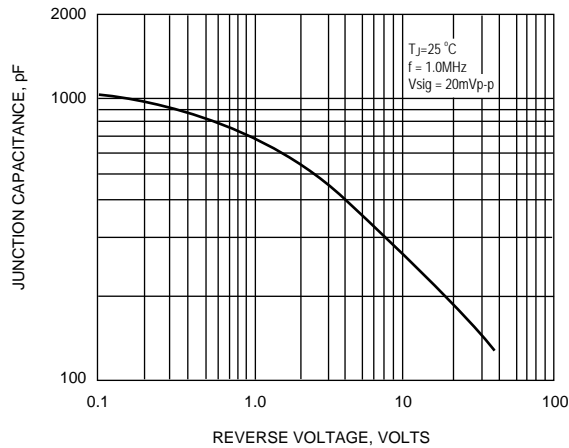


FIG.5 - TYPICAL JUNCTION CAPACITANCE



**PACKING INFORMATION**

| <b>Package</b> | <b>Packing Qty.</b>   |                             |                          | <b>Inner Box Size<br/>(mm)</b> | <b>Carton Size<br/>(mm)</b> |
|----------------|-----------------------|-----------------------------|--------------------------|--------------------------------|-----------------------------|
|                | <b>Tube<br/>(pcs)</b> | <b>Inner box<br/>(kpcs)</b> | <b>Carton<br/>(kpcs)</b> |                                |                             |
| ITO-220AB      | 50                    | 4                           | 8                        | 570 x 147 x 150                | 585 x 316 x 164             |