

VOLTAGE RANGE: 60V

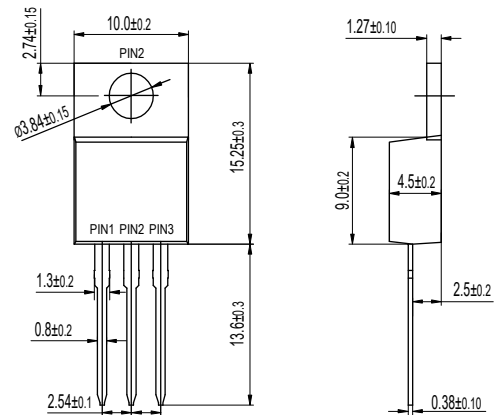
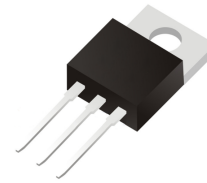
CURRENT: 10A

Features

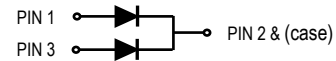
- Ultra low vf
- High efficiency operation
- Low power loss
- Low stored charge majority carrier conduction
- High forward surge capability
- Lead free in compliance with EU RoHS 2011/65/EU directive

Mechanical Data

- Circuit figure: Common cathode
- Leads: Solderable per mil-std-202, Method 208
- Polarity: as marked
- Mounting torque: 5 in-lbs maximum
- Terminals: Puretin plated
- Weight: TO-220AB 1.85 grams



TO-220AB



Maximum Ratings $T_A = 25^\circ\text{C}$ unless otherwise specified

| RATINGS | SYMBOL | SBL1060CT | UNIT |
|--|-------------------|-------------|------|
| Maximum repetitive reverse voltage | VRRM | 60 | V |
| Maximum RMS voltage | VRMS | 42 | V |
| Maximum DC blocking voltage | VDC | 60 | V |
| Maximum average forward current per device per diode | I _{AV} | 10 5 | A |
| Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load | I _{FSM} | 120 | A |
| Typical thermal resistance per diode (Note 1) | R _{θ-JC} | 2.0 | °C/W |
| Operating junction temperature range | T _J | -55 to +150 | °C |
| Storage temperature range | T _{STG} | -55 to +150 | °C |

Notes: 1. Thermal resistance from junction to case.



Electrical Characteristics T_A = 25°C unless otherwise specified

| PARAMETER | SYMBOL | TEST CONDITIONS | MIN. | TYP. | MAX. | UNIT |
|---|-----------------|--|------|------|------|------|
| Breakdown voltage per diode | V _{BR} | I _R =0.5mA | 60 | - | - | V |
| Instantaneous forward voltage per diode | V _F | I _F =5A T _J =25°C | - | 0.54 | 0.60 | V |
| | | I _F =5A T _J =125°C | - | - | 0.55 | V |
| Reverse current per diode | I _R | V _R =60V T _J =25°C | - | - | 150 | μA |
| | | V _R =60V T _J =125°C | - | - | 80 | mA |

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

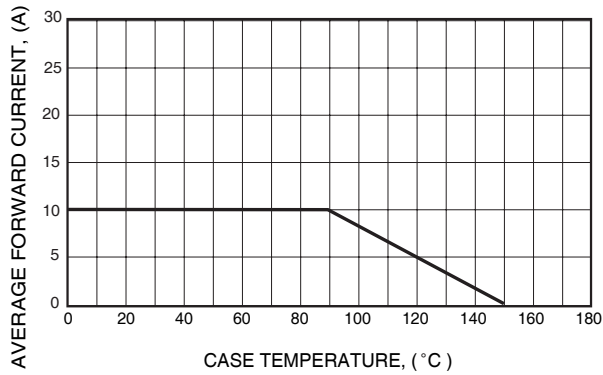


FIG. 2 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

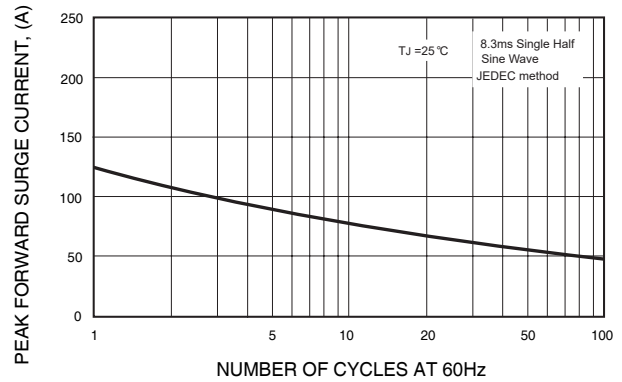


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS

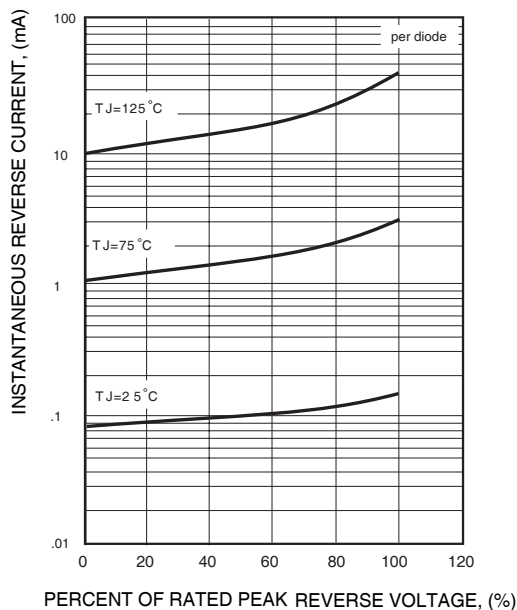


FIG. 4 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

