

**VOLTAGE RANGE: 40 - 200V**

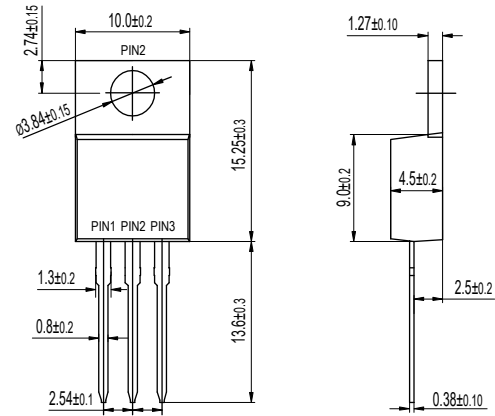
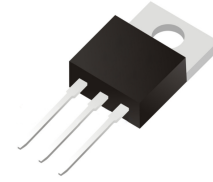
**CURRENT: 10 A**

### Features

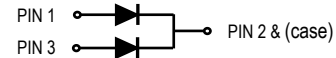
- High efficiency operation
- Low power loss
- Low stored charge majority carrier conduction
- High forward surge capability
- Lead free in compliance with EU RoHS 2011/65/EU directive
- Green molding compound as per IEC61249 Std..(Halogen Free)

### 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 and Electrical Characteristics $T_A = 25^\circ\text{C}$ unless otherwise specified

| RATINGS  | SYMBOL            | SR 1040CT   | SR 1045CT | SR 1060CT | SR 10100CT | SR 10150CT  | SR 10200CT | UNIT |      |
|--|-------------------|-------------|-----------|-----------|------------|-------------|------------|------|------|
| Maximum repetitive reverse voltage   | VRRM              | 40          | 45        | 60        | 100        | 150         | 200        | V    |      |
| Maximum RMS voltage  | VRMS              | 28          | 32        | 42        | 70         | 105         | 140        | V    |      |
| Maximum DC blocking voltage  | VDC               | 40          | 45        | 60        | 100        | 150         | 200        | V    |      |
| Maximum average forward current per device per diode                               | I <sub>AV</sub>   | 10          |           |           |            |             |            |      | A    |
|  |                   | 5           |           |           |            |             |            |      |      |
| Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load | I <sub>FSM</sub>  | 125         |           |           |            |             |            |      | A    |
| Typical thermal resistance (Note 1)  | R <sub>θ-JC</sub> | 2.0         |           |           |            |             |            |      | °C/W |
| Operating junction temperature range   | T <sub>J</sub>    | -55 to +150 |           |           |            | -55 to +175 |            | °C   |      |
| Storage temperature range  | T <sub>STG</sub>  | -55 to +175 |           |           |            |             |            | °C   |      |
| Maximum forward voltage per leg at I <sub>F</sub> =5A                              | V <sub>F</sub>    | 0.65        |           | 0.75      | 0.85       |             | 0.92       | V    |      |
| Maximum average reverse current at rated DC blocking voltage                       | I <sub>R</sub>    |             | 0.10      |           |            |             | 0.01       | mA   |      |
|  |                   |             | 15        |           |            |             | 5          |      |      |

Notes: 1. Thermal resistance from junction to case.

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

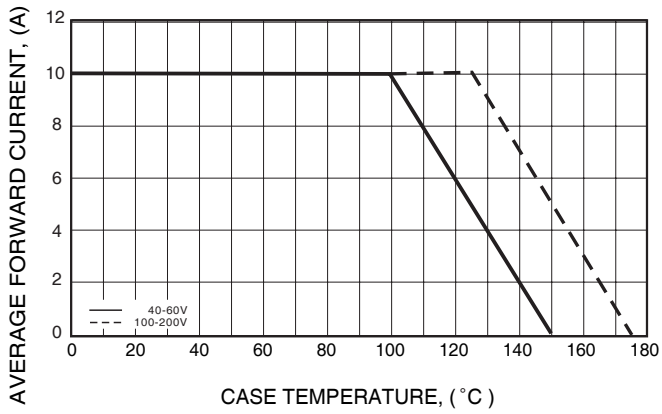


FIG. 2 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

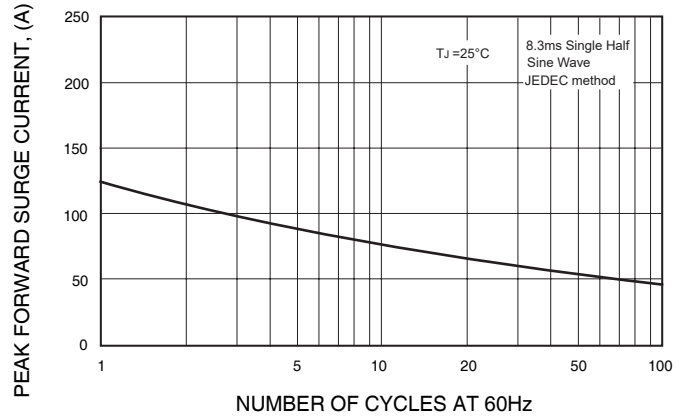


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS

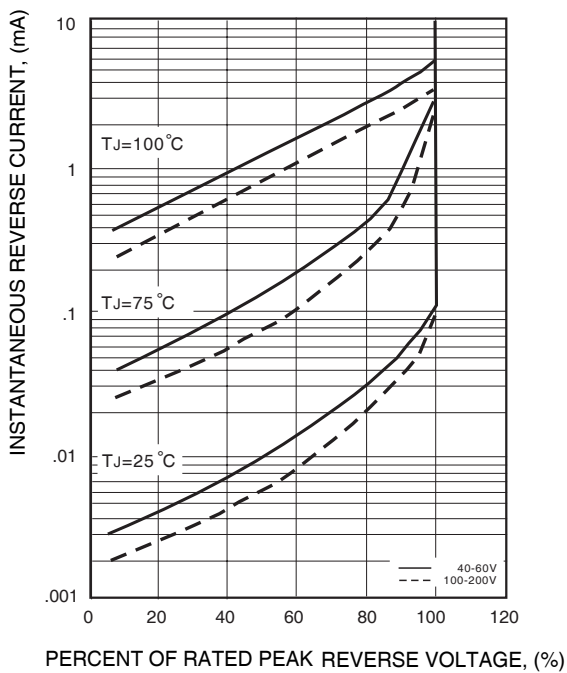


FIG. 4 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

