

## 8 Amp. Glass Passivated Bridge Rectifier

| <p><b>Dimensions in mm.</b></p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <th>L</th> <th>suffix</th> </tr> <tr> <td>17.5±0.5</td> <td></td> </tr> <tr> <td>8±0.5</td> <td>-4</td> </tr> </table> <p><b>Plastic Case</b></p> | L   | suffix | 17.5±0.5 |  | 8±0.5 | -4 | <p><b>Voltage</b><br/>50 to 1000 V</p> <p><b>Current</b><br/>8.0 A</p> |
|--|---|--------|----------|--|-------|----|--|
| L  | suffix  |        |          |  |       |    |  |
| 17.5±0.5   |   |        |          |  |       |    |  |
| 8±0.5  | -4  |        |          |  |       |    |  |
| <p><b>• Mounting Instructions</b></p> <ul style="list-style-type: none"> <li>• High temperature soldering guaranteed: 260 °C – 10 sc.</li> <li>• Recommended mounting torque: 8 Kg.cm.</li> </ul>  | <ul style="list-style-type: none"> <li>• <b>Glass Passivated Junction Chips.</b></li> <li>• UL recognized under component index file number E320541.</li> <li>• Lead and polarity identifications.</li> <li>• Case: Molded Plastic.</li> <li>• Ideal for printed circuit board (P.C.B.).</li> <li>• High surge current capability.</li> <li>• The plastic material carries U/L recognition 94 V-O.</li> </ul> |        |          |  |       |    |  |

### Maximum Ratings, according to IEC publication No. 134

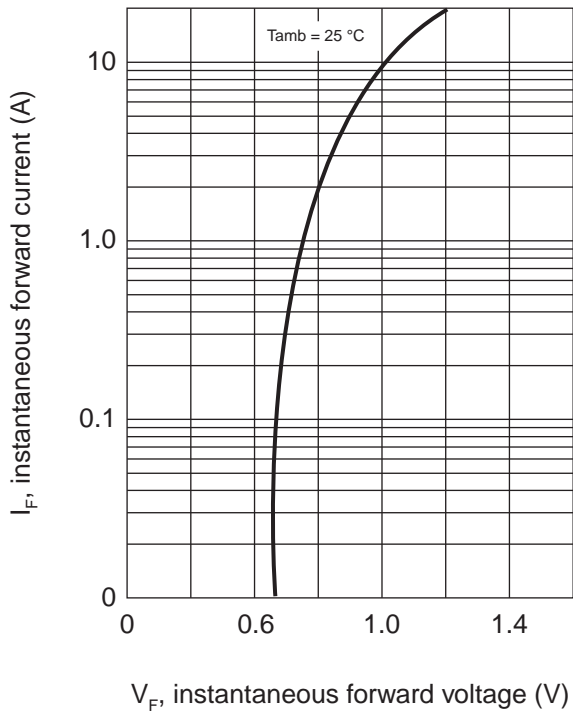
|             |  | <b>FBI8A<br/>5M1</b>              | <b>FBI8B<br/>5M1</b> | <b>FBI8D<br/>5M1</b> | <b>FBI8G<br/>5M1</b> | <b>FBI8J<br/>5M1</b> | <b>FBI8K<br/>5M1</b> | <b>FBI8M<br/>5M1</b> |
|-------------|--|-----------------------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| $V_{RRM}$   | Peak recurrent reverse voltage (V)                             | 50                                | 100                  | 200                  | 400                  | 600                  | 800                  | 1000                 |
| $V_{RMS}$   | Maximum RMS voltage (V)  | 35                                | 70                   | 140                  | 280                  | 420                  | 560                  | 700                  |
| $I_{F(AV)}$ | Max. Average forward current with heatsink<br>without heatsink | 8.0 A at 100 °C<br>3.0 A at 40 °C |                      |                      |                      |                      |                      |                      |
| $I_{FSM}$   | 8.3 ms. peak forward surge current<br>(Jedec Method)           | 200 A                             |                      |                      |                      |                      |                      |                      |
| $I^2t$      | Rating for fusing (t<8.3 ms.)                                  | 166 A <sup>2</sup> sec            |                      |                      |                      |                      |                      |                      |
| $V_{DIS}$   | Dielectric strength (Terminals to case, AC 1 min.)             | 1500 V                            |                      |                      |                      |                      |                      |                      |
| $T_j$       | Operating temperature range                                    | -55 to + 150 °C                   |                      |                      |                      |                      |                      |                      |
| $T_{stg}$   | Storage temperature range                                      | -55 to + 150 °C                   |                      |                      |                      |                      |                      |                      |

### Electrical Characteristics at Tamb = 25°C

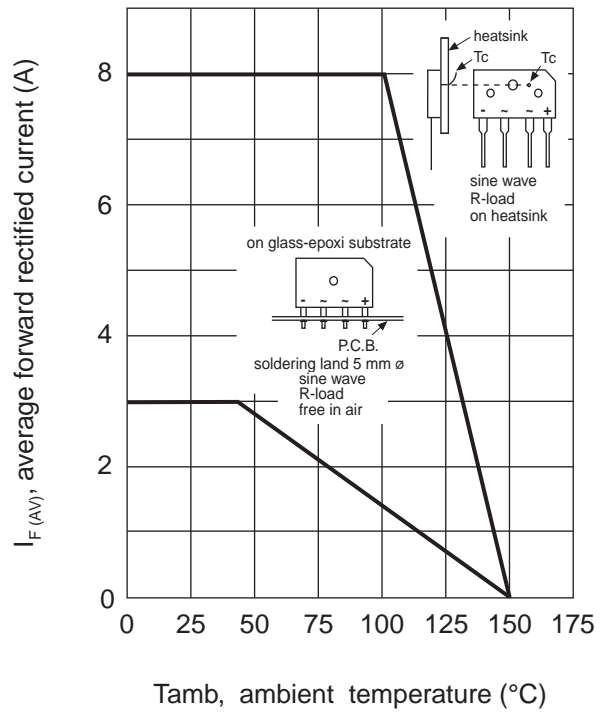
|               |   |          |
|---------------|---|----------|
| $V_F$         | Max. forward voltage drop per element $I_F = 8$ A | 1.1 V    |
| $I_R$         | Max. reverse current per element at $V_{RRM}$     | 5 µA     |
|               | <b>MAXIMUM THERMAL RESISTANCE</b>                 |          |
| $R_{th(j-c)}$ | Junction-Case. With Heatsink.                     | 2.2 °C/W |
| $R_{th(j-a)}$ | Junction-Ambient. Without Heatsink.               | 22 °C/W  |

**Characteristic Curves**

TYPICAL FORWARD CHARACTERISTIC



FORWARD CURRENT DERATING CURVE



MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

