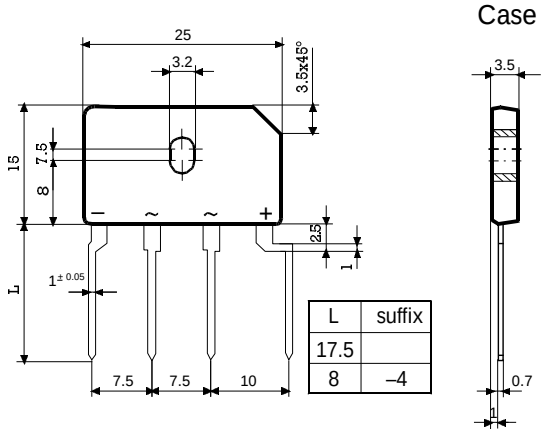
# 5 Amp. Glass Passivated Bridge Rectifier

Dimensions in mm.

Plastic Case




| L | suffix |
|---|---|
| 17.5 | |
| 8 | –4 |

Voltage
100 to 600 V.

Current
5.0 A.

HYPERECTIFIER®

- **Mounting Instructions**
- High temperature soldering guaranteed: 260 ºC – 10 sc.
- Recommended mounting torque: 8 Kg.cm.

- **Glass Passivated Junction Chips.**
- UL recognized under component index file number E130180.
- Lead and polarity identifications.
- Case: Molded Plastic.
- Ideal for printed circuit board (P.C.B.).
- High surge current capability.
- The plastic material carries U/L recognition 94 V-O.

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

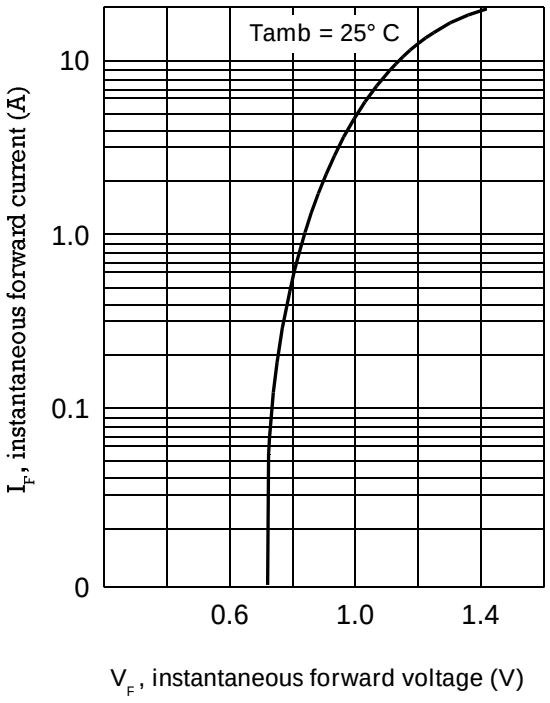
| | | FBI5.1B 1M1 | FBI5.1D 1M1 | FBI5.1F 1M1 | FBI5.1J 1M1 |
|---|---|---|---|---|---|
| $V_{RRM}$ | Peak Recurrent Reverse Voltage (V) | 100 | 200 | 300 | 600 |
| $V_{RMS}$ | Maximum RMS Voltage (V) | 70 | 140 | 210 | 420 |
| $V_R$ | Recommended Input Voltage (V) | 40 | 80 | 125 | 250 |
| $I_{F(AV)}$ | Max. Average forward current with heatsink<br>without heatsink | 5.0 A at 100 ºC<br>3.0 A at 25 ºC | | | |
| $I_{FRM}$ | Recurrent peak forward current | 30 A | | | |
| $I_{FSM}$ | 10 ms. peak forward surge current | 400 A | | | |
| $I^2t$ | $I^2t$ value for fusing (t = 10 ms) | 800 $A^2$ sec | | | |
| $V_{DIS}$ | Dielectric strength (terminals to case, AC 1 min.) | 1500 V | | | |
| $T_j$ | Operating temperature range | – 40 to + 150 °C | | | |
| $T_{stg}$ | Storage temperature range | – 40 to +150 ºC | | | |

## Electrical Characteristics at Tamb = 25°C

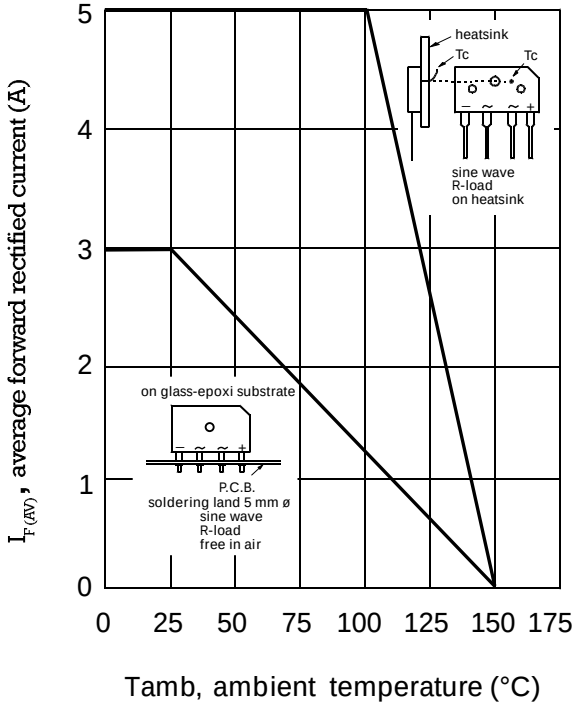
| | | |
|---|---|---|
| $V_F$ | Max. forward voltage drop per element at $I_F$ = 5 A | 1.1 V |
| $I_R$ | Max. reverse current per element at $V_{RRM}$ | 5 µA |
| $R_{th\ (j-c)}$<br>$R_{th\ (j-a)}$ | MAXIMUM THERMAL RESISTANCE<br>Junction-Case. With Heatsink.<br>Junction-Ambient. Without Heatsink. | 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

## Characteristic Curves

TYPICAL FORWARD CHARACTERISTIC




FORWARD CURRENT DERATING CURVE




MAXIMUM NON-REPETITIVE PEAK
FORWARD SURGE CURRENT