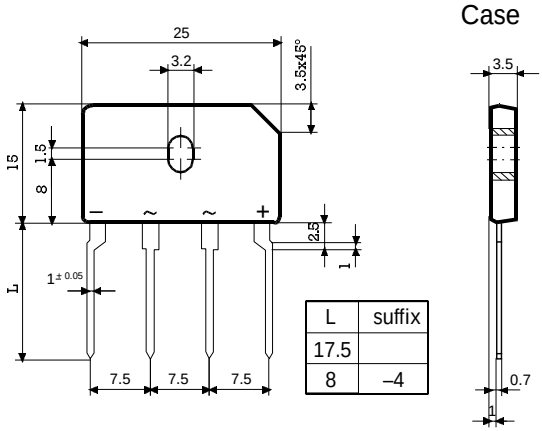
# 10 Amp. Glass Passivated Bridge Rectifier

Dimensions in mm.

Plastic Case




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

Voltage
50 to 1000 V.

Current
10 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 E320541.
- 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

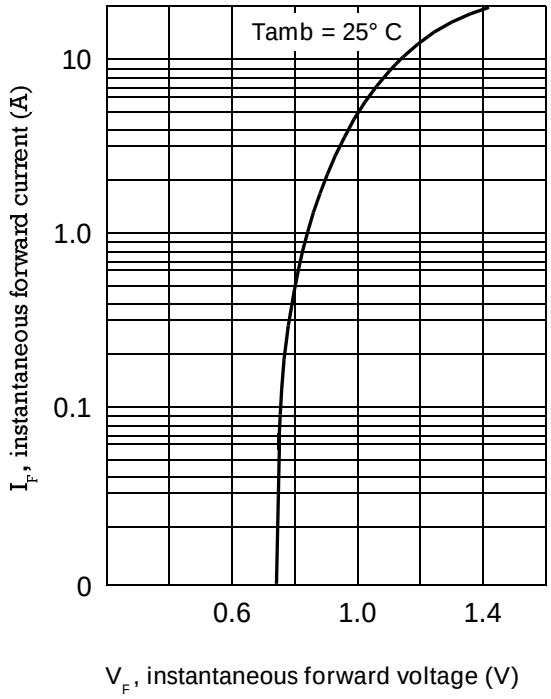
| | | FBI10A 7M1 | FBI10B 7M1 | FBI10D 7M1 | FBI10G 7M1 | FBI10J 7M1 | FBI10K 7M1 | FBI10M 7M1 |
|---|---|---|---|---|---|---|---|---|
| $V_{RRM}$ | Peak recurrent reverse voltage (V) | 50 | 100 | 200 | 400 | 600 | 800 | 1000 |
| $V_{RMS}$ | Maximum RMS voltage (V) | 35 | 70 | 140 | 280 | 420 | 560 | 700 |
| $I_{F(AV)}$ | Max. Average forward current with heatsink<br>without heatsink | 10.0 A at 100 ºC<br>3.0 A at 25 ºC | | | | | | |
| $I_{FSM}$ | 10 ms. peak forward surge current (Jedec Method) | 170 A | | | | | | |
| $I^2t$ | Current squared time (rating for fusing)<br>(1ms.<t<10ms. Tc = 25ºC) | 110 $A^2$ sec | | | | | | |
| $V_{DIS}$ | Dielectric strength (terminals to case, AC 1 min.) | 2500 V | | | | | | |
| $T_j$ | Operating temperature range | – 55 to + 150 °C | | | | | | |
| $T_{stg}$ | Storage temperature range | – 55 to +150 ºC | | | | | | |

## Electrical Characteristics at Tamb = 25°C

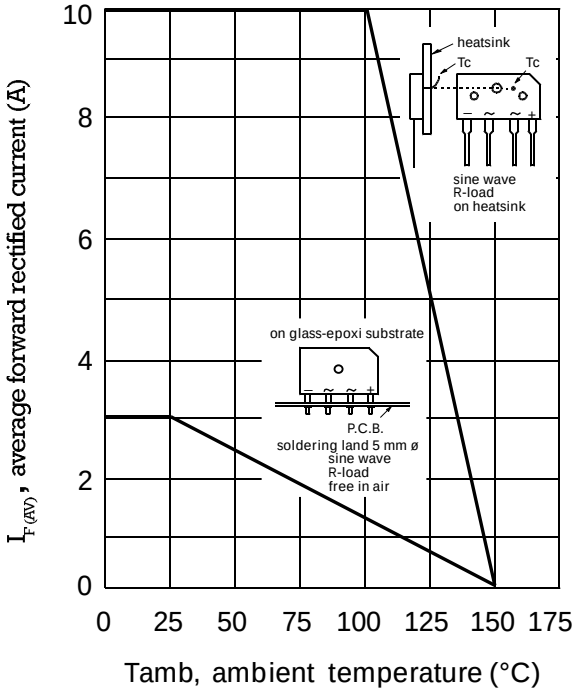
| | | |
|---|---|---|
| $V_F$ | Max. forward voltage drop per diode at $I_F$ = 5.0 A | 1.10 V |
| $I_R$ | Max. instantaneous reverse current at $V_{RRM}$ | 5 µA |
| | MAXIMUM THERMAL RESISTANCE | |
| $R_{th\ (j-c)}$ | Junction-Case. With Heatsink. | 2.2 ºC/W |
| $R_{th\ (j-a)}$ | Junction-Ambient. Without Heatsink. | 22 ºC/W |

## Characteristic Curves

TYPICAL FORWARD CHARACTERISTIC




FORWARD CURRENT DERATING CURVE




MAXIMUM NON-REPETITIVE PEAK
FORWARD SURGE CURRENT