semiconductors :: product :: Bridge Rectifiers (In Line)

## **Product:** Bridge Rectifiers (In Line)

Bridge Rectifiers are key devices in many applications where a rectifier signal is required as Input voltage. Linear Power Supplies, SMPS, Battery Chargers, Electronic Ballast... are some applications where they are used.

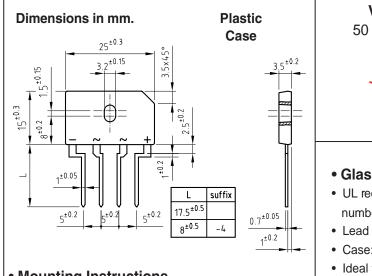
Manufactured using HYPERECTIFIER© technology, we offer these devices in several different packages: SMD, Dual In Line, Round, In Line and Square Power.

| Product  | Family   | $I_{F(AV)}(A)$ | $I_{FSM}(A)$ | $V_{RRM}(V)$ | $V_F(V)$ | OUTLINE        |
|----------|----------|----------------|--------------|--------------|----------|----------------|
| FB18J5M1 | FBI8-5M1 | 8.0            | 200          | 600          | 1.1      | In Line medium |

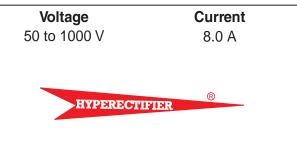




## 8 Amp. Glass Passivated Bridge Rectifier



- Mounting Instructions
- High temperature soldering guaranteed: 260 °C 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

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

## **Electrical Characteristics at Tamb = 25°C**

| V <sub>F</sub>        | Max. forward voltage drop per element $I_F = 8 \text{ A}$  | 1.1 V    |
|-----------------------|--|----------|
| I <sub>R</sub>        | Max. reverse current per element at $V_{\mbox{\tiny RRM}}$ | 5 μΑ     |
|                       | MAXIMUM THERMAL RESISTANCE                                 |          |
| R <sub>th (j-c)</sub> | Junction-Case. With Heatsink.                              | 2.2 °C/W |
| R <sub>th (j-a)</sub> | Junction-Ambient. Without Heatsink.                        | 22 °C/W  |