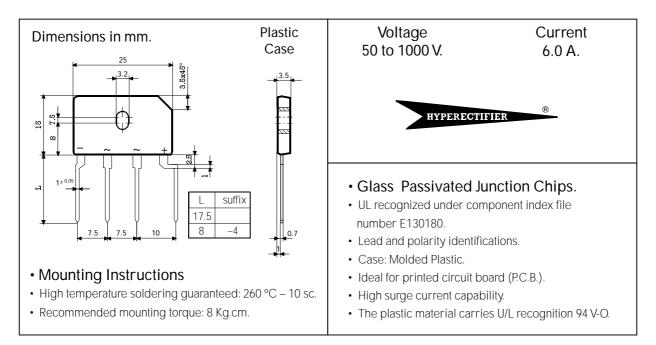


6 Amp. Glass Passivated Bridge Rectifier



Maximum Ratings, according to IEC publication No. 134

| | | FBI6A 1M1 | FBI6B 1M1 | FBI6D 1M1 | FBI6G 1M1 | FBI6J 1M1 | FBI6K 1M1 | FBI6M 1M1 |
|--------------------|---|-----------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Vrrm | Peak recurrent reverse voltage (V) | 50 | 100 | 200 | 400 | 600 | 800 | 1000 |
| Vrms | Maximum RMS voltage (V) | 35 | 70 | 140 | 280 | 420 | 560 | 700 |
| I _{F(AV)} | Max. Average forward current with heatsink without heatsink | 6.0 A at 100 °C 3.0 A at 40 °C | | | | | | |
| FSM | 10 ms. peak forward surge current (Jedec Method) | 170 A | | | | | | |
| l ² t | Current squared time (rating for fusing) (1ms. <t<10ms. tc="25°C)</td"><td colspan="6">140 A² sec</td></t<10ms.> | 140 A ² sec | | | | | | |
| Vdis | Dielectric strength (terminals to case, AC 1 min.) | 2000 V | | | | | | |
| Tj | 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 diode at $\rm I_{\rm F}$ = 3.0 A | 1.05 V |
|-----------------------|--|----------|
| I _R | Max. instantaneous reverse current at $V_{\text{\tiny RRM}}$ | 5μΑ |
| | MAXIMUM THERMAL RESISTANCE | |
| R _{th (j-c)} | Junction-Case. With Heatsink. | 2.2 °C/W |
| R _{th (j-a)} | Junction-Ambient. Without Heatsink. | 22 °C/W |



10

1.0

0.1

0

 ${\rm I}_{\rm F}$, instantaneous forward current (A)

TYPICAL FORWARD CHARACTERISTIC FORWARD CURRENT DERATING CURVE 8 $I_{\Gamma^{(\mathrm{AV})}}$, average forward rectified current (A) 6 sine wave R-load on heatsin on glass-epoxi substrat o 4 ĩĩ P.C.B. soldering land 5 mm sine wave R-load free in air 2

 $V_{_{\rm F}}$, instantaneous forward voltage (V)

1.0

1.4

0.6

Tamb = 25° C

MAXIMUM NON-REPETITIVE PEAK

0

0

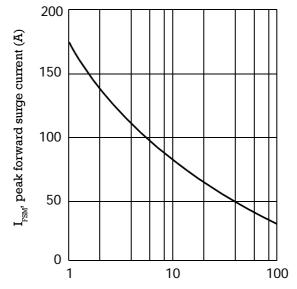
25

50

75 100 125 150 175

Tamb, ambient temperature (°C)

FORWARD SURGE CURRENT



Number of cycles at 50 Hz.