



### 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 HYPERRECTIFIER® 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
<a href="#">FBI6D1M1</a>	FBI6-1M1	6.0	170	200	1.05	In Line medium

## 6 Amp. Glass Passivated Bridge Rectifier

<p>Dimensions in mm.</p> <p>Plastic Case</p>	<p>Voltage 50 to 1000 V.</p> <p>Current 6.0 A.</p>
<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

		FBI6A 1M1	FBI6B 1M1	FBI6D 1M1	FBI6G 1M1	FBI6J 1M1	FBI6K 1M1	FBI6M 1M1
$V_{RRM}$	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 without heatsink	6.0 A at 100 °C 3.0 A at 40 °C						
$I_{FSM}$	10 ms. peak forward surge current (Jedec Method)	170 A						
$I^2t$	Current squared time (rating for fusing) (1ms.<t<10ms. Tc = 25°C)	140 A <sup>2</sup> sec						
$V_{DIS}$	Dielectric strength (terminals to case, AC 1 min.)	2000 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 diode at $I_F = 3.0 A$	1.05 V
$I_R$	Max. instantaneous reverse current at $V_{RRM}$	5 $\mu A$
$R_{th(j-c)}$	MAXIMUM THERMAL RESISTANCE Junction-Case. With Heatsink.	2.2 °C/W
$R_{th(j-a)}$	Junction-Ambient. Without Heatsink.	22 °C/W