



FB5000..... FB5006

50 Amp. Glass Passivated Bridge Rectifier

Dimensions in mm.

The technical drawing shows two views of the HYPRECTIFIER component. The top view (left) shows a rectangular component with a central circular feature. Dimensions include a width of 16.6 mm, a height of 14.3 mm, and a central diameter of $\varnothing 5.21 \pm 0.1$ mm. The side view (right) shows a component with a height of 19.5 ± 1 mm, a base width of 18.1 mm, and a central diameter of $\varnothing 2.5$ mm. A label 'Metal heat sink' points to the base of the component.

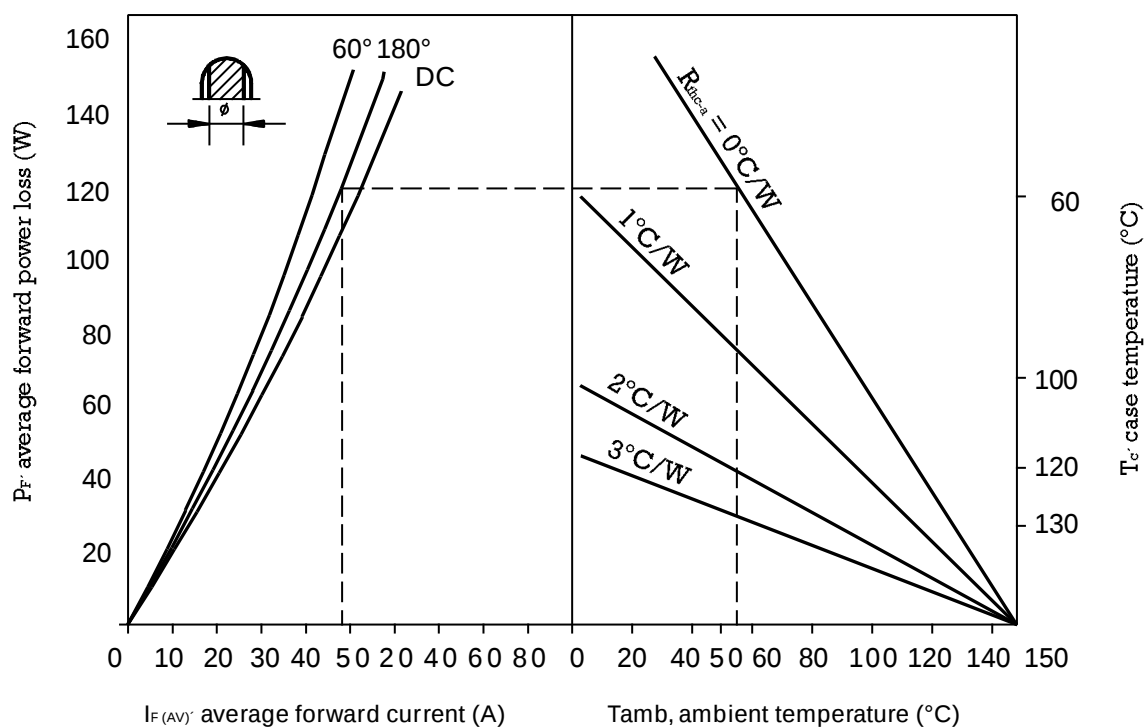
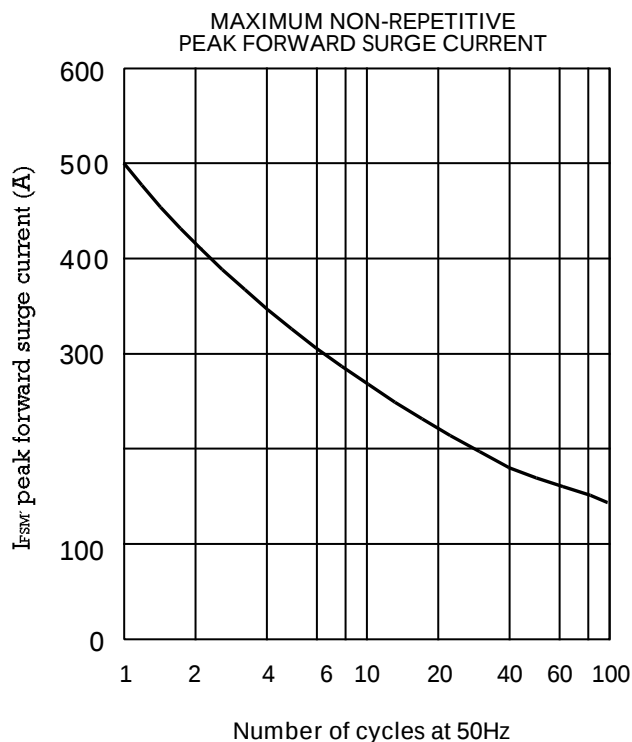
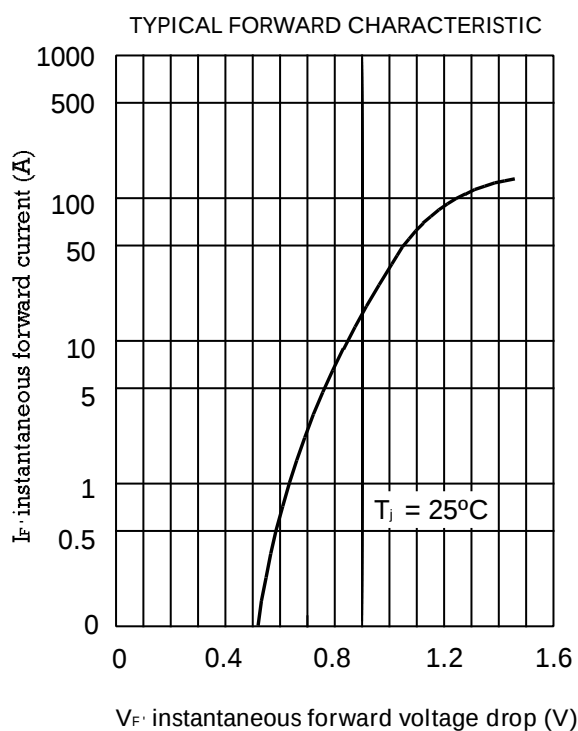
Maximum Ratings, according to IEC publication No. 134

		FB 5000	FB 5001	FB 5002	FB 5004	FB 5006
V_{RRM}	Peak Recurrent Reverse Voltage (V)	50	100	200	400	600
V_{RMS}	Maximum RMS Voltage (V)	35	70	140	280	420
V_R	Recommended Input Voltage (V)	20	40	80	125	250
$I_{F(AV)}$	Max. forward current R-load: At $T_{case} = 55^{\circ}C$ At $T_{case} = 90^{\circ}C$ With Al Square Chassis (200 cm ² x 3 mm.) $T_{amb} = 45^{\circ}C$	50 A 35 A 16 A				
I_{FRM}	Recurrent peak forward current	150 A				
I_{FSM}	10 ms. peak forward current	500 A				
I^2t	I^2t value for fusing (t = 10 ms)	1250 A ² sec				
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 element at $I_F = 25\text{ A}$	1.1 V
I_R	Max. reverse current per element at V_{RRM} d.c.	5 $\mu\text{ A}$
R_{thj-c}	Typical thermal resistance junction to case	1.2 °C/W
	Isolation voltage from case to leads	2500 Vac

Characteristic Curves



Interrelation between power dissipation and the max. allowable ambient temperature.