

Fly-back Convertor Power Supply

FBC-I2W



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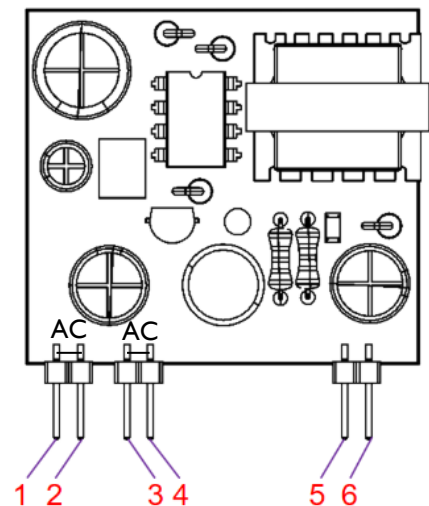
Highlights & Features

- For standby circuit
- For bias class d amplifier
- 3v to 24v wide range vdd voltage
- Fixed 60 khz switching frequency
- Current mode control
- Overtemperature, overcurrent and overvoltage Protection with auto restart

General Description

The FBC-I2W combines a dedicated current mode PWM controller with a high voltage Power MOSFET on the same silicon chip. Typical applications cover off line power supplies for battery charger adapters, standby power supplies for TV or monitors, bias class d, auxiliary supplies etc. The internal control circuit offers the following benefits:

- Large input voltage range on the VDD pin accommodates changes in auxiliary supply voltage. This feature is well adapted to battery charger adapter configurations.
- Automatic burst mode in low load condition.
- Overvoltage protection in hiccup mode.



PIN CONNECTIONS

Pin	Parameter	Range	Range
1-2	Input Voltage Range (AC)	85-260VAC	125-365VDC
3-4	Input Voltage Range (AC)	85-260VAC	0 VDC
5	Output (12W)	12V	
6	GND	GND	

Output Adjustable

$$V_{out} = 2.5 \times \left(1 + \frac{RT}{RD}\right)$$

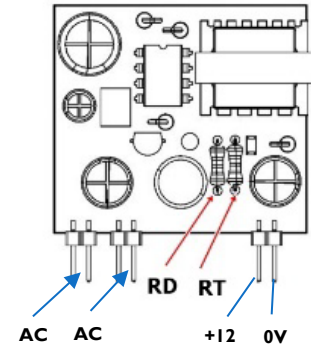
FBC-12W Output = 12V

RT = 0.25W 1% 12K

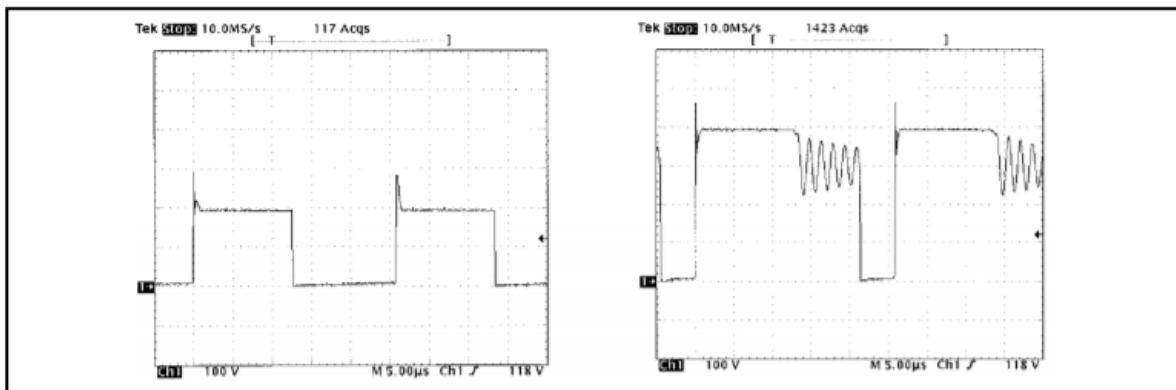
RD = 0.25W 1% 3K

Adjustable Table

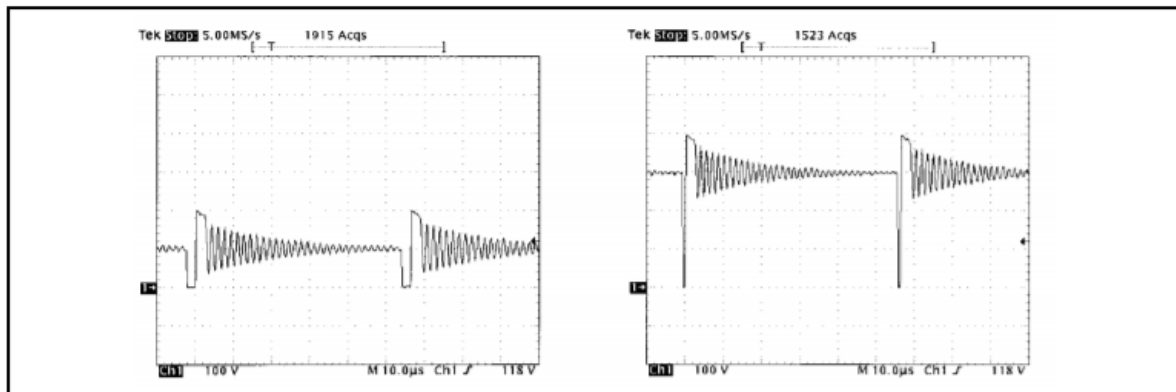
Output Voltage	Output Current	RT	RD
5V	2.4A	12.0K	12.0K
9V	1.3A	12.0K	4.6K
12V	1A	12.0K	3K
15V	800mA	12.0K	2.4K
18V	660mA	12.0K	1.9K
24V	500mA	12.0K	1.4K



Drain voltage at full load (left: Vin = 100 VDC, right: Vin = 300 VDC)

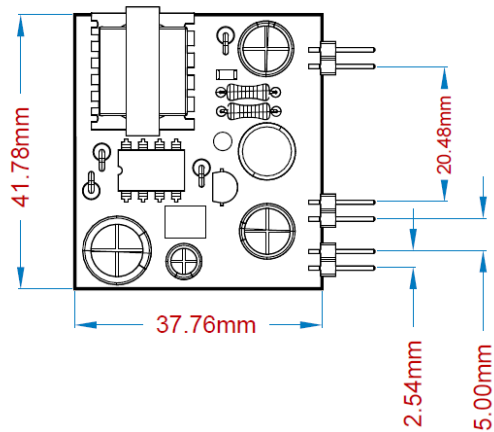


Drain voltage in OFF mode (left: Vin = 100 VDC, right: Vin = 300 VDC)



FBC-12W : Flyback Converter Dimension 1:1

View from Top side (Scale 1:1)



View from Front side (Scale 1:1)

