FEATURES：

- Fixed voltage input,unregulated output,2W
- Continuous short-circuit protection,self recover
- I/O isolation voltage 3KV
- Working temperature：-40℃～+105℃
- No additional components required
- Stable performance and high reliability (MTBF≥3500K hours)
- Industry standard pin-out
- Flame-retardant case to meet UL94 V-0 requirements
- DIP package

Selection Guide

Part No.	INPUT		OUTPUT			Full Load Efficiency （%/Typ）	CapacitiveLoad(μF)
	Norminal （Vdc）	Range （Vdc）	Voltage (Vdc)	Min current (mA)	Max current (mA)		
F0503D-2WR3	5	4.5-5.5	3.3	40	400	78	2200
F0505D-2WR3			5	40	400	81	2200
F0509D-2WR3			9	22	222	84	1000
F0512D-2WR3			12	17	167	81	560
F0515D-2WR3			15	13	133	81	560
F0524D-2WR3			24	8	83	84	220
F1203D-2WR3	12	10.8-13.2	3.3	40	400	78	2200
F1205D-2WR3			5	40	400	81	2200
F1209D-2WR3			9	22	222	84	1000
F1212D-2WR3			12	17	167	81	560
F1215D-2WR3			15	13	133	81	560
F1224D-2WR3			24	8	83	84	220
F2403D-2WR3	24	21.6-26.4	3.3	40	400	78	2200
F2405D-2WR3			5	40	400	81	2200
F2409D-2WR3			9	22	222	84	1000
F2412D-2WR3			12	17	167	81	560
F2415D-2WR3			15	13	133	81	560
F2424D-2WR3			24	8	83	84	220

customized accepted ,pls contact sales for details

Input Specifications

Input Filter	Capacitive Filter	
Ctrl	NONE	
	NONE	
Hot Plug	Unavailable	

Output Specifications

Item	Min	Typ	Max	Test Conditions
Voltage Accuracy	-	-	-	

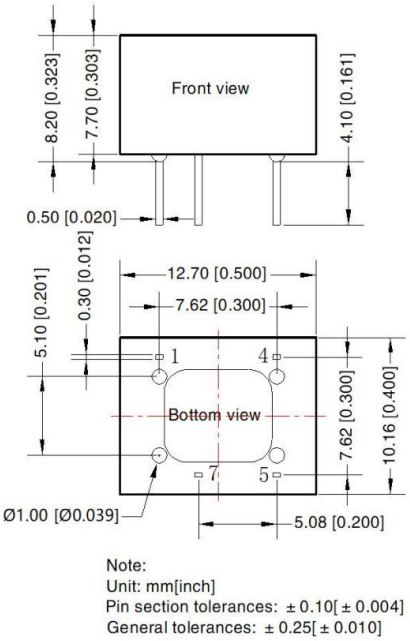
Line Regulation		-	-	±1.2%	Input voltage ±1%
Load Regulation	3.3Vout	-	-	15%	10% to 100% full load
	5Vout	-	-	7%	
	9Vout	-	-	5%	
	12Vout	-	-	5%	
	15Vout	-	-	4%	
	24Vout	-	-	3%	
Ripple&Noise			50mVp-p	75mVp-p	20MHz Bandwidth, full load

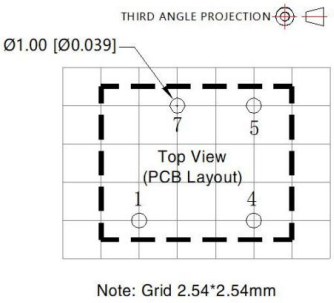
Gerneral Specifications

Switching Frequency	250KHz(Typ)	100% full load, nominal input voltage
Short-Circuit Protection	Continuous, self-recovery	
Case Temperature Rise	25℃（Typ）	
Temperature Coefficient	0.02%/℃	100% full load
Pin Soldering Resistance Temperature	300℃	Soldering spot is 1.5mm away from case for 10 seconds
Isolation（Input-Output）	3KVDC	Input-output electric strength test for 1 minute with a leakage current
Insulation Resistance（Input-Output）	1000MΩ	Input-output resistance 500Vdc
Operating Temperature	-40～+105℃	
Storage Temperature	-55～+125℃	
Storage Humidity	<95%	Non-condensing
Cooling Method	Free air convection	
Case Material	Black plastic; flame-retardant and heat-resistant (UL94 V-0)	
Weight	2g（Typ）	

**Unless specified, otherwise all other parameters are tested under the following conditions: nominal input voltage, pure resistive load, 25℃ room temperature environment.

Dimensions and Recommended Layout





Pins

Pin	Mark		
1	GND		
4	Vin		
5	+Vo		
7	0V		

Recommended Circuit

Recommended input and output capacitor values

Vin	Cin	Vout	Cout	
5VDC	4.7uF/16V	3.3/5VDC	10uF/16V	
12VDC	4.7uF/25V	9/12VDC	2.2uF/25V	
24VDC	4.7uF/50V	15/24VDC	1uF/50V	

Noted

1. Input current: Ensure that the output current of the power supply meets the instantaneous starting current of the power module (that is, twice the average input current of the power module).

2. Output load requirements: Avoid no-load use. When the actual power consumption of the load is less than 10% of the rated output power of the module or no load occurs, connect an external resistance to the output end (the sum of the external resistance and the load power is greater than or equal to 10% of the rated load) or select a module with a smaller rated power.

3. The external capacitance of the output end should not be too large; otherwise, the module may be overcurrent or poorly started. For

details, see the external capacitance recommendation table.

4. External LC filter circuit can be connected for occasions with high ripple noise requirements.

*The final interpretation right of the product belongs to ECCO ELECTRONICS.