FEATURES：

- Fixed voltage input,unregulated single output,0.5W
- Continuous short-circuit protection,self recover
- I/O isolation voltage 1.5KV
- 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
- SIP 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)		
B0303M-W5R3	3.3	2.97-3.63	3.3	15	152		
B0305M-W5R3			5	10	100		
B0309M-W5R3			9	6	56		
B0312M-W5R3			12	4	42		
B0315M-W5R3			15	3	33		
B0324M-W5R3			24	2	21		
B0503M-W5R3	5	4.5-5.5	3.3	15	152		
B0505M-W5R3			5	10	100	75	220
B0509M-W5R3			9	6	56		
B0512M-W5R3			12	4	42		
B0515M-W5R3			15	3	33		
B0524M-W5R3			24	2	21		
B1203M-W5R3	12	10.8-13.2	3.3	15	152		
B1205M-W5R3			5	10	100		
B1209M-W5R3			9	6	56		
B1212M-W5R3			12	4	42		
B1215M-W5R3			15	3	33		
B1224M-W5R3			24	2	21		
B1505M-W5R3	15	13.5-16.5	5	10	100		
B1509M-W5R3			9	6	56		
B1512M-W5R3			12	4	42		
B1515M-W5R3			15	3	33		
B1524M-W5R3			24	2	21		
B2403M-W5R3	24	21.6-26.4	3.3	15	152		
B2405M-W5R3			5	10	100		
B2409M-W5R3			9	6	56		
B2412M-W5R3			12	4	42		

B2415M-W5R3			15	3	33		
B2424M-W5R3			24	2	21		

customized accepted ,pls contact sales for details

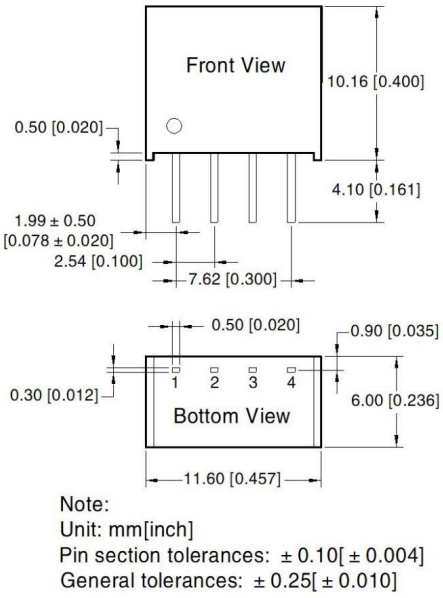
Input Specifications		
Input Filter	Capacitive Filter	
Ctrl	NONE	
	NONE	
Hot Plug	Unavailable	

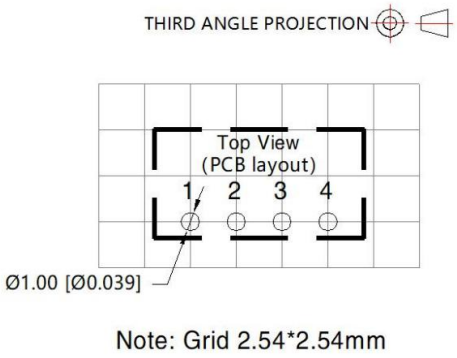
Output Specifications				
Item	Min	Typ	Max	Test Conditions
Voltage Accuracy	0%	2.5%	5%	Input voltage range and load
Line Regulation	-	-	±1.2%	Input voltage from low to high voltage, full load
Load Regulation	-	-	5%	10% to 100% full load
Ripple&Noise	-	50mVp-p	75mVp-p	20MHz Bandwidth, full load

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）	1.5KVDC	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%RH	Non-condensing
Cooling Method	Free air convection	
Case Material	Black plastic; flame-retardant and heat-resistant (UL94 V-0)	
Weight	1.4g（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		
2	Vin		
3	0V		
4	+Vo		

Recommended Circuit

Fig.3

Recommended input and output capacitor values

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