

FEATURES:

- Fixed voltage input, unregulated single output, 0.1W
- Continuous short-circuit protection, self recover
- I/O isolation voltage 1.5KV
- Working temperature: $-40^{\circ}\text{C} \sim +105^{\circ}\text{C}$
- No additional components required
- Stable performance and high reliability (MTBF $\geq 3500\text{K}$ 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)	Capacitive Load (μF)
	Normal (Vdc)	Range (Vdc)	Voltage (Vdc)	Min current (mA)	Max current (mA)		
B0303S-1WR3	3.3	2.97-3.63	3.3	30	30	75	2200
B0305S-1WR3			5	20	20	82	2200
B0309S-1WR3			9	11	12	83	1000
B0312S-1WR3			12	8	9	84	560
B0315S-1WR3			15	7	7	84	560
B0324S-1WR3			24	4	4	85	220
B0503S-1WR3	5	4.5-5.5	3.3	30	30	75	2200
B0505S-1WR3			5	20	20	82	2200
B0509S-1WR3			9	11	12	83	1000
B0512S-1WR3			12	8	9	84	560
B0515S-1WR3			15	7	7	84	560
B0524S-1WR3			24	4	4	85	220
B0903S-1WR3	9	8.1-9.9	3.3	30	30	75	2200
B0905S-1WR3			5	20	20	82	2200
B0909S-1WR3			9	11	12	83	1000
B0912S-1WR3			12	8	9	84	560
B0915S-1WR3			15	7	7	84	560
B0924S-1WR3			24	4	4	85	220
B1203S-1WR3	12	10.8-13.2	3.3	30	30	75	2200
B1205S-1WR3			5	20	20	82	2200
B1209S-1WR3			9	11	12	83	1000
B1212S-1WR3			12	8	9	84	560
B1215S-1WR3			15	7	7	84	560
B1224S-1WR3			24	4	4	85	220
B1503S-1WR3	15	13.5-16.5	3.3	30	30	75	2200
B1505S-1WR3			5	20	20	82	2200
B1509S-1WR3			9	11	12	83	1000

B1512S-1WR3			12	8	9	84	560
B1515S-1WR3			15	7	7	84	560
B1524S-1WR3			24	4	4	85	220
B2403S-1WR3	24	21.6-26.4	3.3	30	30	75	2200
B2405S-1WR3			5	20	20	82	2200
B2409S-1WR3			9	11	12	83	1000
B2412S-1WR3			12	8	9	84	560
B2415S-1WR3			15	7	7	84	560
B2424S-1WR3			24	4	4	85	220

customized accepted ,pls contact sales for details

Input Specifications

Input Filter	Capacitive Filter		
Ctrl	NONE		
	NONE		
Hot Plug	Unavailable		

Output Specifications

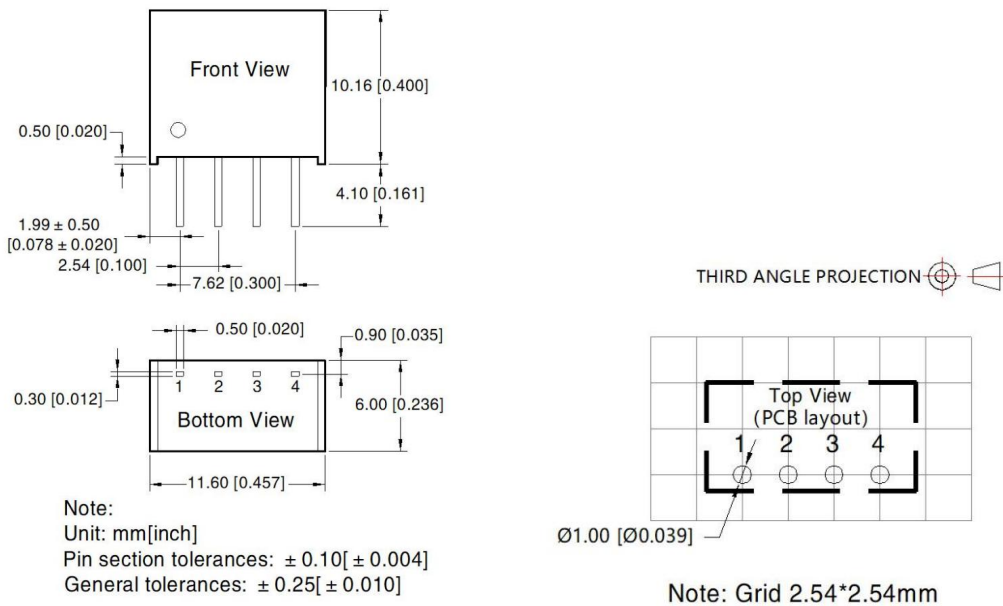
Item		Min	Typ	Max	Test Conditions
Voltage Accuracy		0%	±5%	±10%	Input voltage range and load
Load Regulation	3.3Vout	-	15%	18%	10% to 100% full load
	5Vout	-	8%	13%	
	9Vout	-	7%	9%	
	12Vout	-	6%	8%	
	15Vout	-	5%	8%	
	24Vout	-	5%	7%	
Line Regulation		-		±5%	Input voltage ±1%
Ripple&Noise		-	50mVp-p	75mVp-p	20MHz Bandwidth, full load

General 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°C room temperature environment.

Dimensions and Recommended Layout



Pins

Pin	Mark		
1	GND		
2	Vin		
3	0V		
4	+Vo		

Recommended Circuit



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