

FEATURES:

- Fixed voltage input, regulated single output, 1W
- Continuous short-circuit protection, self recover
- I/O isolation voltage 1.5KV
- Working temperature: -40°C~+105°C
- No additional components required
- Stable performance and high reliability (MTBF≥3500K hours)
- Industry standard pin-out
- Flame-retardant case to meet UL94-V0 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	303	79	2400
B0305S-1WR3			5	20	200	82	2400
B0309S-1WR3			9	11	111	82	1000
B0312S-1WR3			12	9	83	82	560
B0315S-1WR3			15	7	67	82	560
B0324S-1WR3			24	4	42	84	220
B0503S-1WR3	5	4.5-5.5	3.3	30	303	74	2400
B0505S-1WR3			5	20	200	82	2400
B0509S-1WR3			9	11	111	83	1000
B0512S-1WR3			12	9	83	83	560
B0515S-1WR3			15	7	67	83	560
B0524S-1WR3			24	4	42	85	220
B1203S-1WR3	12	10.8-13.2	3.3	30	303	75	2400
B1205S-1WR3			5	20	200	80	2400
B1209S-1WR3			9	11	111	80	1000
B1212S-1WR3			12	9	83	80	560
B1215S-1WR3			15	7	67	81	560
B1224S-1WR3			24	4	42	81	220
B1505S-1WR3	15	13.5-16.5	5	20	200	80	2400
B1509S-1WR3			9	11	111	80	1000
B1512S-1WR3			12	9	83	80	560
B1515S-1WR3			15	7	67	81	560
B1524S-1WR3			24	4	42	81	220
B2403S-1WR3	24	21.6-26.4	3.3	30	303	75	2400
B2405S-1WR3			5	20	200	79	2400
B2409S-1WR3			9	11	111	80	1000
B2412S-1WR3			12	9	83	81	560

B2415S-1WR3		15	7	67	81	560
B2424S-1WR3		24	4	42	81	220

customized accepted ,pls contact sales for details

Input Specifications

Input Filter	Capacitive Filter	
Ctrl	NONE	
	NONE	
Hot Plug	Unavailable	

Output Specifications

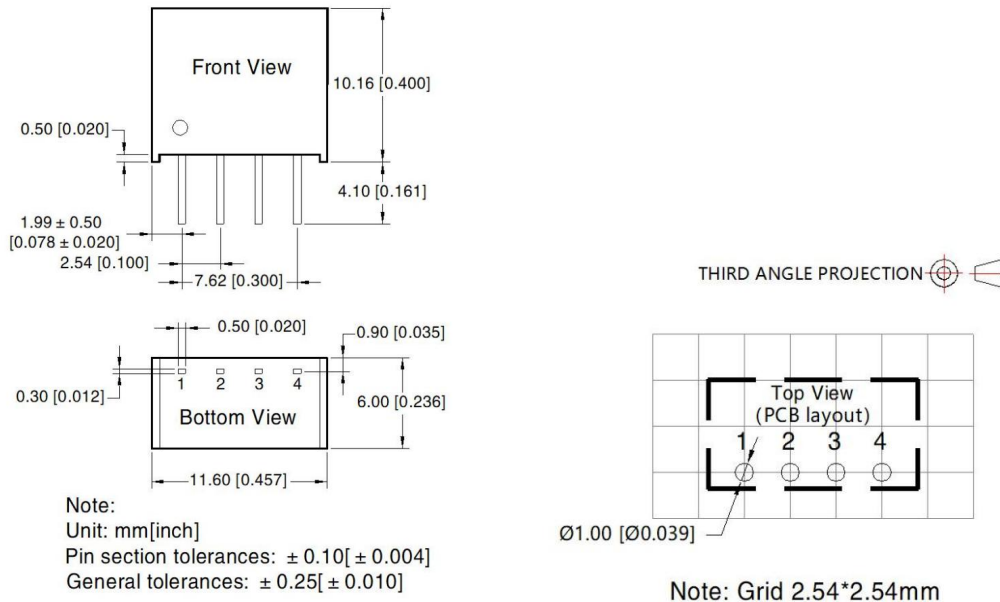
Item	Typ	Max	Test Conditions
Voltage Accuracy	±1%	±3%	input voltage range and load
Line Regulation	±0.2%	±0.5%	Input voltage from low to high voltage, full load
Load Regulation	±0.5%	±1%	10% to 100% full load
Ripple&Noise	50mVp-p	150mVp-p	20MHz Bandwidth, full load

General Specifications

Switching Frequency	300KHz(Typ)	100% full load, nominal input voltage
Short-Circuit Protection	Continuous, self-recovery	
Case Temperature Rise	15°C (Typ)	
Temperature Coefficient	0.03%/°C	100% full load
Pin Soldering Resistance Temperature	300°C	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°C	
Storage Temperature	-55~+125°C	
Storage Humidity	<95%	Non-condensing
Cooling Method	Free air convection	
Case Material	Black plastic; flame-retardant and heat-resistant (UL94 V-0)	
Weight	1.3g (Typ)	

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

Temperature derating Curve**Dimensions and Recommended Layout**



Pins

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

Recommended Circuit



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.