

FEATURES:

- Fixed voltage input, single/dual unregulated output, 1W
- 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-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)		
B0303LS-1WR3	3.3	2.97-3.63	3.3	31	303	74	2200
B0305LS-1WR3			5	20	200	78	2200
B0309LS-1WR3			9	12	111	80	1000
B0312LS-1WR3			12	9	83	80	560
B0315LS-1WR3			15	7	67	80	560
B0324LS-1WR3			24	5	42	82	220
A0503S-1WR3	5	4.5-5.5	±3.3	±15	±151	74	1000
A0505S-1WR3			±5	±10	±100	82	1000
A0509S-1WR3			±9	±6	±56	83	470
A0512S-1WR3			±12	±5	±42	83	220
A0515S-1WR3			±15	±4	±33	83	220
A0524S-1WR3			±24	±3	±21	85	100
B0503LS-1WR3			3.3	31	303	74	2200
B0505LS-1WR3			5	20	200	78	2200
B0509LS-1WR3			9	12	111	80	1000
B0512LS-1WR3			12	9	83	80	560
B0515LS-1WR3			15	7	67	80	560
B0524LS-1WR3			24	5	42	82	220
A1203S-1WR3	12	10.8-13.2	±3.3	±15	±151	74	1000
A1205S-1WR3			±5	±10	±100	82	1000
A1209S-1WR3			±9	±6	±56	83	470
A1212S-1WR3			±12	±5	±42	83	220
A1215S-1WR3			±15	±4	±33	83	220
A1224S-1WR3			±24	±3	±21	85	100
B1203LS-1WR3			3.3	31	303	74	2200
B1205LS-1WR3			5	20	200	78	2200
B1209LS-1WR3			9	12	111	80	1000

B1212LS-1WR3			12	9	83	80	560
B1215LS-1WR3			15	7	67	80	560
B1224LS-1WR3			24	5	42	82	220
A1503S-1WR3	15	13.5-16.5	±3.3	±15	±151	74	1000
A1505S-1WR3			±5	±10	±100	82	1000
A1509S-1WR3			±9	±6	±56	83	470
A1512S-1WR3			±12	±5	±42	83	220
A1515S-1WR3			±15	±4	±33	83	220
A1524S-1WR3			±24	±3	±21	85	100
B1505LS-1WR3			5	20	200	78	2200
B1509LS-1WR3			9	12	111	80	1000
B1512LS-1WR3			12	9	83	80	560
B1515LS-1WR3			15	7	67	80	560
B1524LS-1WR3			24	5	42	82	220
A2403S-1WR3	24	21.6-26.4	±3.3	±15	±151	74	1000
A2405S-1WR3			±5	±10	±100	82	1000
A2409S-1WR3			±9	±6	±56	83	470
A2412S-1WR3			±12	±5	±42	83	220
A2415S-1WR3			±15	±4	±33	83	220
A2424S-1WR3			±24	±3	±21	85	100
B2403LS-1WR3			3.3	31	303	74	2200
B2405LS-1WR3			5	20	200	78	2200
B2409LS-1WR3			9	12	111	80	1000
B2412LS-1WR3			12	9	83	80	560
B2415LS-1WR3			15	7	67	80	560
B2424LS-1WR3			24	5	42	82	220

customized accepted ,pls contact sales for details

Input Specifications

Input Filter	Capacitive Filter	
Ctrl	NONE	
	NONE	
Hot Plug	Unavailable	

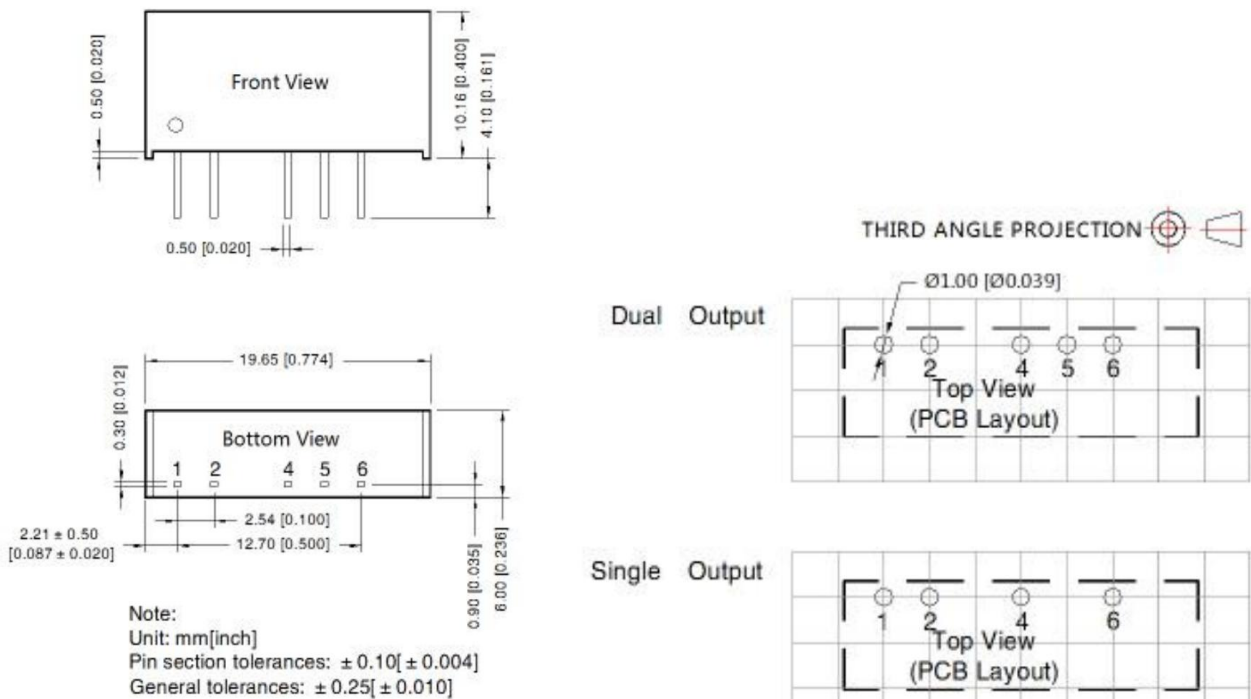
Output Specifications

Item		Min	Typ	Max	Test Conditions
Voltage Accuracy					
Line Regulation		-	-	±1.2%	Input voltage ±1%
Load Regulation	3.3V,±3.3Vout	-	-	15%	10% to 100% full load
	5V,±5Vout	-	-	10%	
	9V,±9Vout	-	-	8%	
	12V,±12Vout	-	-	6%	
	15V,±15Vout	-	-	6%	
	24V,±24Vout	-	-	5%	

Ripple&Noise	-	50mVp-p	75mVp-p	20MHz Bandwidth, full load
Gernerel 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	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

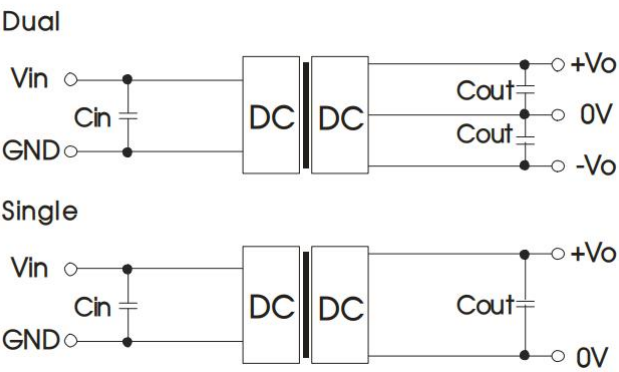


Pin-out

Pin	Singe	Dual	
1	Vin	Vin	

2	GND	GND	
4	0V	-Vo	
5	No Pin	0V	
6	+Vo	+Vo	

Recommended Circuit



Recommended input and output capacitor values						
Vin		Cin	Single Vout	Cout	Dual Vout	Cout
3.3V	3.3VDC	10uF/16VDC	3.3/5VDC	10uF/16V	±3.3/±5VDC	10uF/16V
	-	-	9/12VDC	2.2uF/25V	±9/±12VDC	2.2uF/25V
	-	-	15/24VDC	1uF/50V	±15/±24VDC	1uF/50V
	5VDC	4.7uF/16VDC	3.3/5VDC	10uF/16V	±3.3/±5VDC	4.7uF/16V
	12VDC	2.2uF/25VDC	7.2/9VDC	2.2uF/16V	±9VDC	1uF/16V
	15VDC	2.2uF/25VDC	12VDC	2.2uF/25VDC	±12VDC	1uF/25V
	24VDC	1uF/50V	15VDC	1uF/25VDC	±15VDC	0.47uF/25V
	-	-	24VDC	1uF/50V	±24VDC	0.47uF/50V

Note

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.