

FEATURES:

- Wide input range
- 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≥2 million 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-3WR3	3.3	2.97-3.83	3.3	50	500	79	2400		
B0305S-3WR3			5	50	500	85	2400		
B0309S-3WR3			9	33	333	85	1000		
B0312S-3WR3			12	25	250	85	560		
B0315S-3WR3			15	20	200	86	560		
B0324S-3WR3			24	13	125	86	220		
A0303S-3WR3			±3.3	±13	±250				
A0305S-3WR3			±5	±13	±250				
A0309S-3WR3			±9	±8	±167				
A0312S-3WR3			±12	±5	±104				
A0315S-3WR3			±15	±4	±83				
A0324S-3WR3			±24	±3	±52				
B0503S-3WR3			5	4.5-5.5	3.3	50	500	79	2400
B0505S-3WR3					5	50	500	85	2400
B0509S-3WR3	9	33			333	85	1000		
B0512S-3WR3	12	25			250	85	560		
B0515S-3WR3	15	20			200	86	560		
B0524S-3WR3	24	13			125	86	220		
A0503S-3WR3	±3.3	±13			±250				
A0505S-3WR3	±5	±13			±250				
A0509S-3WR3	±9	±8			±167				
A0512S-3WR3	±12	±5			±104				
A0515S-3WR3	±15	±4			±83				
A0524S-3WR3	±24	±3			±52				
B1203S-3WR3	12	10.8-13.2			3.3	50	500	79	2400
B1205S-3WR3					5	50	500	85	2400
B1209S-3WR3			9	33	333	85	1000		

B1212S-3WR3			12	25	250	85	560		
B1215S-3WR3			15	20	200	86	560		
B1224S-3WR3			24	13	125	86	220		
A1203S-3WR3			±3.3	±13	±250				
A1205S-3WR3			±5	±13	±250				
A1209S-3WR3			±9	±8	±167				
A1212S-3WR3			±12	±5	±104				
A1215S-3WR3			±15	±4	±83				
A1224S-3WR3			±24	±3	±52				
B1503S-3WR3			15	13.5-16.5	3.3	50	500	79	2400
B1505S-3WR3	5	50			500	85	2400		
B1509S-3WR3	9	33			333	85	1000		
B1512S-3WR3	12	25			250	85	560		
B1515S-3WR3	15	20			200	86	560		
B1524S-3WR3	24	13			125	86	220		
A1503S-3WR3	±3.3	±13			±250				
A1505S-3WR3	±5	±13			±250				
A1509S-3WR3	±9	±8			±167				
A1512S-3WR3	±12	±5			±104				
A1515S-3WR3	±15	±4			±83				
A1524S-3WR3	±24	±3			±52				
B2403S-3WR3	24	21.6-26.4			3.3	50	500	79	2400
B2405S-3WR3					5	50	500	85	2400
B2409S-3WR3			9	33	333	85	1000		
B2412S-3WR3			12	25	250	85	560		
B2415S-3WR3			15	20	200	86	560		
B2424S-3WR3			24	13	125	86	220		
A2403S-3WR3			±3.3	±13	±250				
A2405S-3WR3			±5	±13	±250				
A2409S-3WR3			±9	±8	±167				
A2412S-3WR3			±12	±5	±104				
A2415S-3WR3			±15	±4	±83				
A2424S-3WR3			±24	±3	±52				

customized accepted ,pls contact sales for details

Input Specifications

Input Filter	Capacitive Filter		
Ctrl	NONE		
	NONE		
Hot Plug	Unavailable		

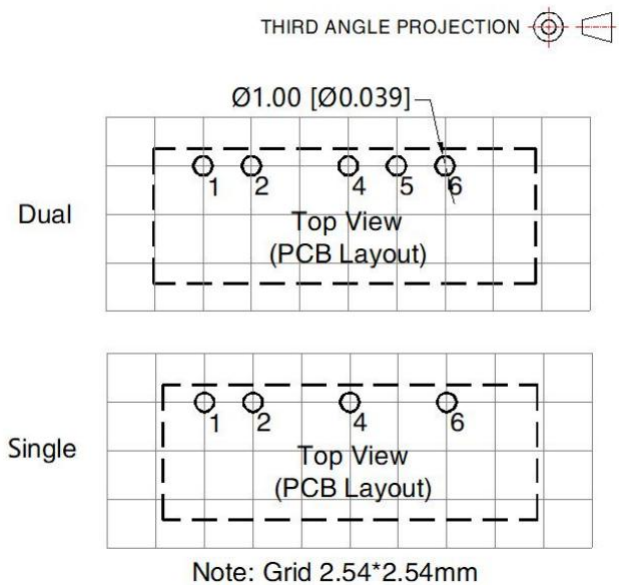
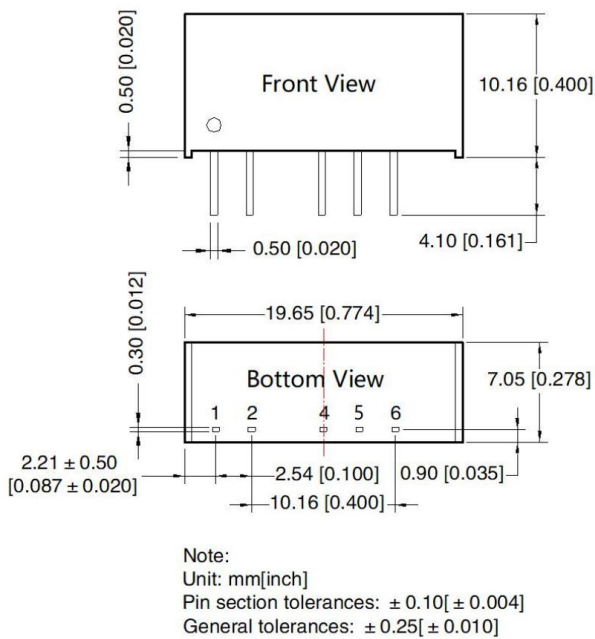
Output Specifications

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	2.1g (Typ)		

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

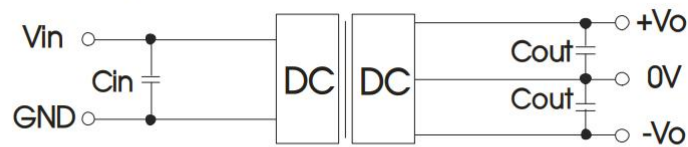
Dimensions and Recommended Layout



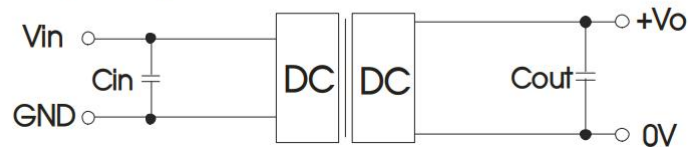
Pinout			
Pin	Singe	Dual	
1	Vin	Vin	
2	GND	GND	
4	0V	-Vo	
5	No Pin	0V	
6	+Vo	+Vo	

Recommended Circuit

Dual Output



Single Output



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