

FEATURES:

- Wide input range
- Continuous short-circuit protection, self recover
- I/O isolation voltage 1.5KV
- Working temperature: -40℃~+85℃
- No additional components required
- Stable performance and high reliability (MTBF≥1000K hours)
- Industry standard pin-out
- Flame-retardant case to meet UL94V-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)		
WRD050505S-2WR3	5	4.5-9	5	20	200	67	680
WRD050909S-2WR3			9	11	111	71	470
WRD051212S-2WR3			12	8	83	72	330
WRD051515S-2WR3			15	7	67	73	220
WRD120505S-2WR3	12	9-18	5	20	200	75	680
WRD120909S-2WR3			9	11	111	77	470
WRD121212S-2WR3			12	8	83	80	330
WRD121515S-2WR3			15	7	67	79	220
WRD240505S-2WR3	24	18-36	5	20	200	76	680
WRD240909S-2WR3			9	11	111	78	470
WRD241212S-2WR3			12	8	83	80	330
WRD241515S-2WR3			15	7	67	79	220
WRD480505S-2WR3	48	36-72	5	20	200	75	680
WRD480909S-2WR3			9	11	111	78	470
WRD481212S-2WR3			12	8	83	79	330
WRD481515S-2WR3			15	7	67	78	220

customized accepted, pls contact sales for details

Output Specifications

Item	Typ	Max	Test Conditions
Voltage accuracy	±1%	±3%	
Load Regulation	±0.2%	±0.5%	10%-100% load
Line regulation	±0.6%	±1%	Input voltage from low to high
Temperature drift (Vout)		±0.02%/℃	
Ripple&Noise	50mVp-p	100mVp-p	20MHz bandwidth

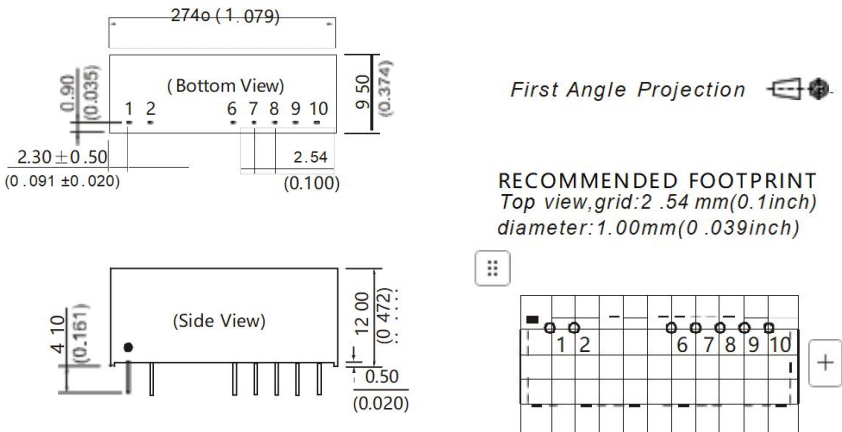
General Specifications

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)	1.6KVDC	Input-output Electric Strength test for 1 minute with a leakage current of 1mA max.
Insulation Resistance (Input-Output)	1000MΩ	Input-output resistance 500Vdc
Operating Temperature	-40~+85℃	
Storage Temperature	-55~+125℃	
Storage Humidity	<95%RH	Non-condensing
Cooling Method	Free air convection	
Case Material	Black plastic; flame-retardant and heat-resistant (UL94V-0)	
Weight	5.6g (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

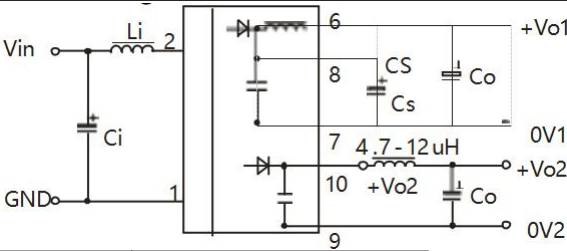


Note:
Unit: mm (inch)
Pin section: 0.50 * 0.30 mm (0.020 * 0.012 inch)
Pin section tolerances: ±0.05 mm (±0.002 inch)
General tolerances: ±0.25 mm (±0.010 inch)

Pins

Pin	Single		
1	GND		
2	Vin		
6	+Vo1		
7	0V1		
8	CS		
9	0V2		
10	+Vo2		

Recommended Circuit



Vin	5VDC&12VDC	24VDC&48VDC
Cin1	100uF	10-47uF
Lin	10-120uH	
Cout	100uF	

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.