

FEATURES:

- Fixed voltage input, single unregulated output, 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
- DIP 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)		
D030303D-1WR3	3.3	2.97-3.63	3.3/3.3	15/15	152/152	79	1000/1000
D030505D-1WR3			5/5	10/10	100/100	82	1000/1000
D030909D-1WR3			9/9	6/6	56/56	84	470/470
D031212D-1WR3			12/12	4/4	42/42	84	220/220
D031515D-1WR3			15/15	3/3	33/33	84	220/220
D032424D-1WR3			24/24	2/2	21/21	82	100/100
D050303D-1WR3	5	4.5-5.5	3.3/3.3	15/15	152/152	79	1000/1000
D050505D-1WR3			5/5	10/10	100/100	82	1000/1000
D050909D-1WR3			9/9	6/6	56/56	84	470/470
D051212D-1WR3			12/12	4/4	42/42	84	220/220
D051515D-1WR3			15/15	3/3	33/33	84	220/220
D052424D-1WR3			24/24	2/2	21/21	82	100/100
D090303D-1WR3	9	8.1-9.9	3.3/3.3	15/15	152/152	79	1000/1000
D090505D-1WR3			5/5	10/10	100/100	82	1000/1000
D090909D-1WR3			9/9	6/6	56/56	84	470/470
D091212D-1WR3			12/12	4/4	42/42	84	220/220
D091515D-1WR3			15/15	3/3	33/33	84	220/220
D092424D-1WR3			24/24	2/2	21/21	82	100/100
D120303D-1WR3	12	10.8-13.2	3.3/3.3	15/15	152/152	79	1000/1000
D120505D-1WR3			5/5	10/10	100/100	82	1000/1000
D120909D-1WR3			9/9	6/6	56/56	84	470/470
D121212D-1WR3			12/12	4/4	42/42	84	220/220
D121515D-1WR3			15/15	3/3	33/33	84	220/220
D122424D-1WR3			24/24	2/2	21/21	82	100/100
D150303D-1WR3			3.3/3.3	15/15	152/152	79	1000/1000
D150505D-1WR3			5/5	10/10	100/100	82	1000/1000
D150909D-1WR3			9/9	6/6	56/56	84	470/470

D151212D-1WR3	15	13.5-16.5	12/12	4/4	42/42	84	220/220
D151515D-1WR3			15/15	3/3	33/33	84	220/220
D152424D-1WR3			24/24	2/2	21/21	82	100/100
D240303D-1WR3	24	21.6-26.4	3.3/3.3	15/15	152/152	79	1000/1000
D240505D-1WR3			5/5	10/10	100/100	82	1000/1000
D240909D-1WR3			9/9	6/6	56/56	84	470/470
D241212D-1WR3			12/12	4/4	42/42	84	220/220
D241515D-1WR3			15/15	3/3	33/33	84	220/220
D242424D-1WR3			24/24	2/2	21/21	82	100/100

customized accepted ,pls contact sales for details

Input Specifications

Input Filter	Capacitive Filter		
Ctrl	NONE		
	NONE		
Hot Plug	Unavailable		

Output Specifications

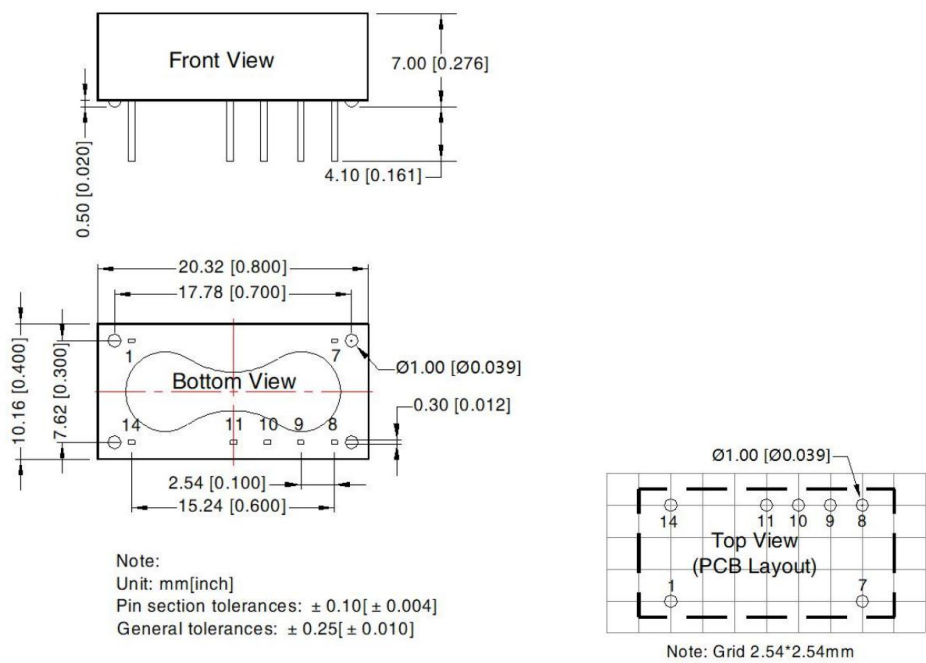
Item		Min	Typ	Max	Test Conditions
Voltage Accuracy		-	-	-	
Line Regulation		-	-	±1.2%	Input voltage ±1%
Load Regulation	3.3/3.3V	-	-	15%	10% to 100% full load
	5/5V	-	-	10%	
	9/9V	-	-	8%	
	12/12V	-	-	6%	
	15/15V	-	-	6%	
	24/24V	-	-	5%	
Ripple&Noise		-	50mVp-p	75mVp-p	20MHz Bandwidth, full load

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	1.8g (Typ)	

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

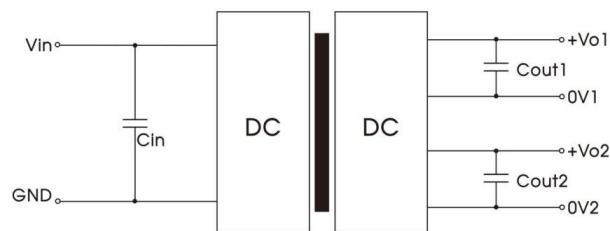
Dimensions and Recommended Layout



Pin-out

Pin			
1	GND		
7	NC		
8	+Vo2		
9	0V2		
10	+Vo1		
11	0Vo1		
14	Vin		

Recommended Circuit



Vin	Cin	Vout	Cout
3.3/5VDC	4.7uF/16VDC	3.3/3/3,5/5VDC	10uF/10V
9/12/15VDC	2.2uF/25VDC	9/9,12/12,15/15VDC	4.7uF/25V
24VDC	1uF/50VDC	24VDC	1uF/50VDC

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.