

FEATURES:

- Fixed voltage input, regulated single output, 1W
- 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≥3500K hours)
- Industry standard pin-out
- Flame-retardant case to meet UL94V-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)		
IB0505LD-1WR3	5	4.75-5.25	5	20	200	70	2400
IB0509LD-1WR3			9	11	111	72	1000
IB0512LD-1WR3			12	9	84	72	560
IB0515LD-1WR3			15	7	67	72	560
IB1205LD-1WR3	12	11.4-12.6	5	20	200	72	2400
IB1209LD-1WR3			9	11	111	72	1000
IB1212LD-1WR3			12	9	84	72	560
IB1215LD-1WR3			15	7	67	72	560
IB2405LD-1WR3	24	22.8-25.2	5	20	200	70	2400
IB2409LD-1WR3			9	11	111	70	1000
IB2412LD-1WR3			12	9	84	70	560
IB2415LD-1WR3			15	7	67	70	560

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	-	3%	Input voltage range and load
Line Regulation	-	±0.25%	Input voltage ±1%
Load Regulation	-	±2%	10% to 100% full load
Ripple & Noise	50mVp-p	75mVp-p	20MHz Bandwidth, full load

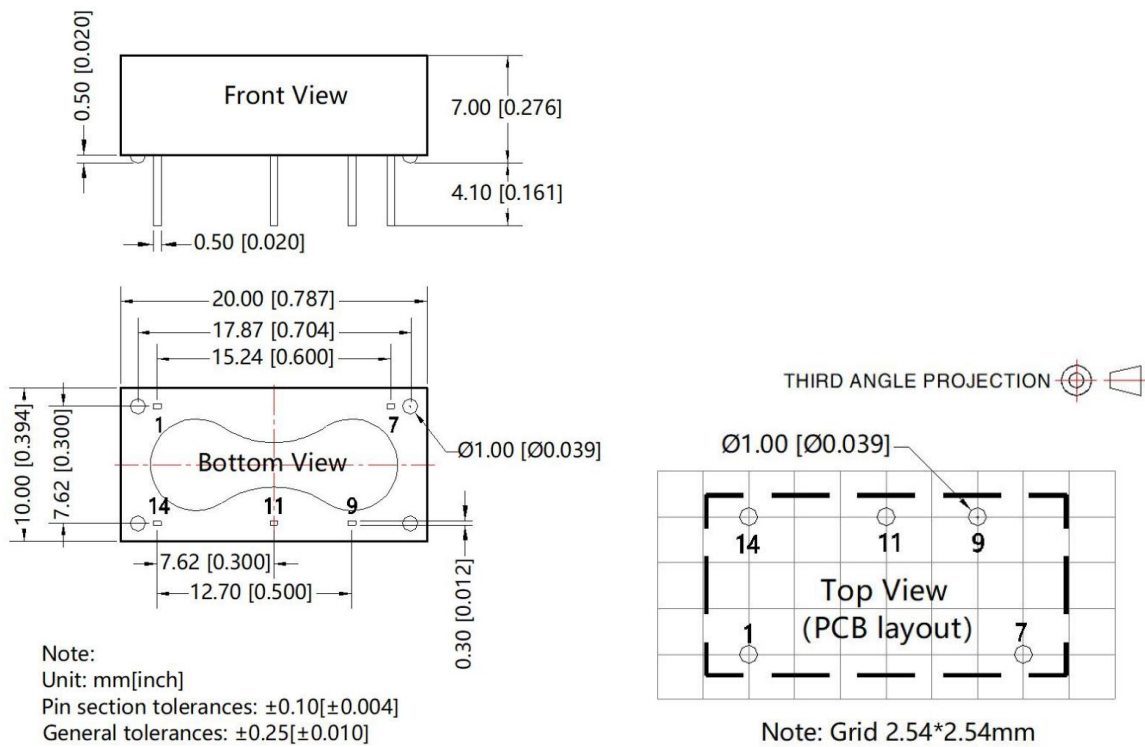
General Specifications

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~+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	2.2g (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



Pinout

Pin	Mark		
1	GND		
7	NC		
9	+Vo		
11	0V		
14	Vin		

Recommended Circuit



Vin	Cin	Vo	Cout
5VDC	4.7uF	3.3/5VDC	10uF
12VDC	4.7uF	9VDC	4.7uF
15VDC	2.2uF	12VDC	2.2uF
24VDC	1uF	15VDC	1uF
-	-	-	-

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.