

Typical Features

- ◆ Wide Input voltage range 2:1
- ◆ Typical transfer efficiency 90%
- ◆ Switching frequency: 300KHz
- ◆ Over current/Short circuit protection, Self-recovery
- ◆ Input-output isolated (1500Vdc)
- ◆ PCB mounting
- ◆ Aluminum case, Low output ripple
- ◆ High power density



Technique Parameters **Test Condition:** Unless otherwise specified, data in the datasheet should be tested under the conditions of inputting nominal voltage, pure resistance rated load and Ta=25°C.

Input Specifications	Min(v)	Nom(v)	Max(v)	Notes
Input voltage Vdc	36	48	72	2:1
Remote Control Terminal (low level)	ON	Connected to Low level or ground switched on		(1-5mA)
	OFF	Connected to high level or suspended switched off		(0mA)
Input Under-Voltage Protection	Lower than the low-end of input voltage, module switched off output, self-recovery			

Output Specifications

Output Voltage Accuracy		Vo1	±1.0%(typ.)
Line Regulation	Nominal Load, full voltage range	Vo1	±0.2%
Load Regulation	20% ~ 100% nominal load	Vo1	±0.5%
Ripple and Noise	20MHz BM ≤ 200mVp-p (Full Load)		
Dynamic Response	25% Nominal load step change	ΔVo1/Δt	±3.0/200μ s%
Output Voltage Adjustment	Nominal output voltage	TRIM	-40% ~ ±20% Adjustable
Start up Delay Time	Typical value		≤200mS

General Specifications

Switching Frequency		300KHz (Typical)	330KHz(Max.)
Operating Board Temperature		Free Air Convection	-40°C ~ +100°C
Storage Temperature			-50°C ~ +125°C
Relative Humidity			10%~90%
Case Material	Aluminum case		

Isolation Voltage	Input-output 1500 Vdc \leq 0.5mA/1min; Input-case 500Vdc \leq 0.5mA/ 1min
MTBF	3X10 ⁵ Hrs

Typical Product List

Part No.	Input voltage range	Output voltage/ current		Input Current	Max	Efficiency (typ.)
		Voltage (Vdc)	Current(mA)	Nominal Voltage (typ.)	Capacitive Load	
				Full load(mA)	μ F	%
WD350-48S28R1	48V (36~72V)	28	12500	/	1000	90
WD400-48S28R1		28	14285	/	1000	90
WD500-48S28R1		28	17857	/	1000	90
WD600-48S28R1		28	21428	/	1000	90
WD700-48S28R1		28	25000	/	1000	90

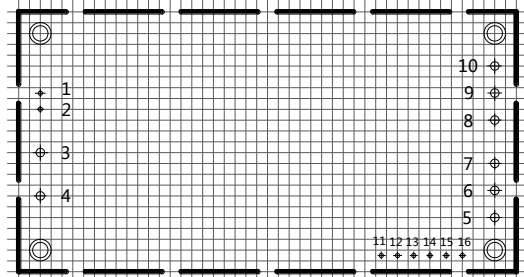
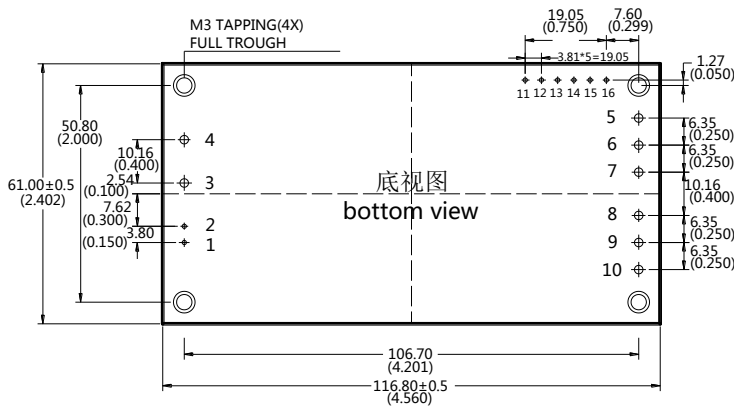
Note: Due to space limitation, above is only a part of our product list, please contact our sales team for more items.

Packing Dimension



Note : 3-10pin Φ 2mm , others Φ 1mm

Unit:mm
Printed board vertical view
Grid:2.54mm(0.1 inch)
General tolerance: \pm 0.25mm
Pin diameter tolerance: \pm 0.10mm



Pin Definition

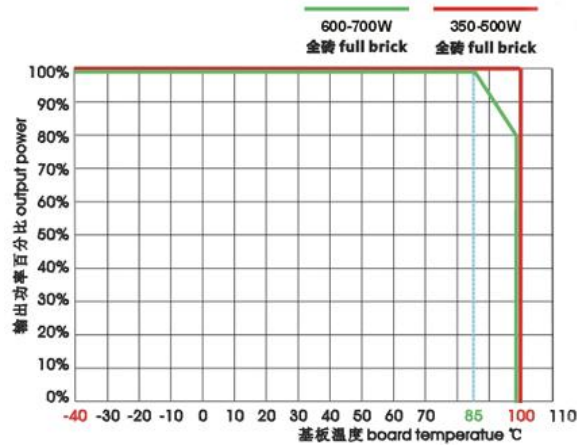
Single(S)	1	2	3	4	5,6,7	8,9,10
	+ON/OFF	-NO/OFF	+Vin	-Vin	-Vo	+Vo
	11	12	13	14	15	16
	AUX	IOG	PC	TRIM	+S	-S

* Note: If the definition of pin is not in accordance with the model selection manual, please refer to the label on actual item.

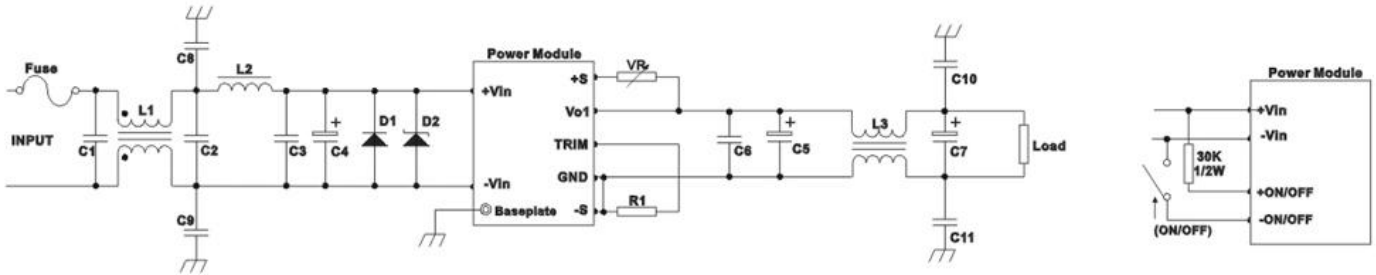
Dimension

Packing Code	L x W x H	
R1	116.84 × 61.00 × 12.70mm	4.600 × 2.402 × 0.500inch

Temperature Curve



Typical Application



Note:

1. Fuse:30A/250V;
2. C1,C2,C3:1uF; C6: 10uF, high frequency ceramic capacitor or polyester capacitor(please pay attention to the choice of withstand voltage)
3. C4:470uF, 100Vdc; C5, C7 as 470uF/50Vdc aluminum electrolytic capacitor;
4. C8,C9,C10,C11: 0.15uF/1500Vdc safety Y capacitor;
5. L1: input common mode filter inductor:1mH;
6. L2: input differential mode filter inductor : 5.6uH;
7. D1: anti reverse voltage diode, meet 100V/30A;
8. D2: transient absorption diode, Model P6KE75A;
9. L3: output common mode inductor or EMI filter.
10. VR is 50KΩ potentiometer, R1 is 6.8KΩ resistor;
11. when wiring for PCB board, output copper line try to be as wide as possible, and line distance cannot be too big, output filter circuit try to be close to module, so to decrease the disturbance.
12. Customer could adjust the parameters of input and output filter according to the actual conditions.