



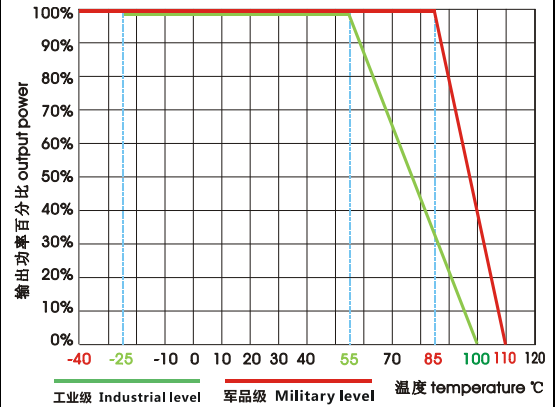
# WD30-50 Series

DC/DC 宽压输入 30-50W (DC/DC wide input 30-50W)

## Typical performance

- ◆ Wide Input voltage range (2:1 or 4:1)
- ◆ Typical Efficiency 85%
- ◆ Switching frequency: 300KHz ± 30 KHz
- ◆ Over current/Short circuit protection, Self-furbish
- ◆ Input-output isolate (500/1000/1500/2000Vdc)
- ◆ PCB Board in-line type installs
- ◆ Metal case, Low Output Ripple

## Temperature graph



**Technology parameter** (Test condition : Unless otherwise indicated, specifications apply over all operating input voltage, resistive load, and temperature conditions)

Input	Min	Nom	Max	Notes
Input voltage	9	12	18	2:1
	18	24	36	2:1
	36	48	72	2:1
	72	110	144	2:1
	10	12	36	4:1
	18	48	72	4:1
Remote (Positive logic control)		ON	High level or vacant	3.5Vdc~+Vin
		OFF	Low level or connect ground	≤0.3Vdc
Input undervoltage protection	Lower than the low-input voltage protection , Self-furbish			

## Output

Voltage accuracy		Vo1	±1.0%,
Line regulation	Nominal Load, full voltage range	Vo1	±0.2%

Load regulation	20% ~ 100% rated voltage	Vo1	±0.5%
Ripple and noise	20MHz BM (Full Load) Vo≤5.0V, ≤50mVp-p; Vo≥48V, ≤180mVp-p; Other, ≤100mVp-p;		
Dynamic response	25% Nominal load step change(increase or reduce)	$\Delta Vo1/\Delta t$	±4.0/500us%
Voltage adjust	Nominal output	TRIM	±10%(adjust)
Turn-on delay time	Typical value		≤200mS

## General

Efficiency	Nominal input, Full load	Vo≤5.0V,80%(Typical)	Vo>5.0V, 87%(Typical)
Switching frequency		300KHz (Typical)	Max 330KHz
Operating temperature	Free air	Industrial level	-25℃ ~ +55℃
		Military level	-40℃ ~ +85℃
Storage temperature		Industrial level	-40℃ ~ +105℃
		Military level	-55℃ ~ +120℃
Max case temperature		Industrial level	+100℃
		Military level	+110℃
Relative humidity			10%~90%
case material			Metal case
Isolation Voltage	500/1000/1500/2000 Vdc ≤0.5mA/1min, 500Vdc ≤0.5mA/1min		
(MTBF)	2X10 <sup>5</sup> Hrs		

## Product Nomination Method

Example	W D 50 – 48 S 05 J ① ② ③ ④ ⑤ ⑥ ⑦		
①	Wide range voltage input: 2:1	⑥	Output voltage
②	Power convert mode D (DC-DC)	⑦	J : Indicate Military level, Non: Indicate Industrial level
③	Output Watt		G : Indicate input output no isolate
④	Input voltage		I : Indicate dual output isolate

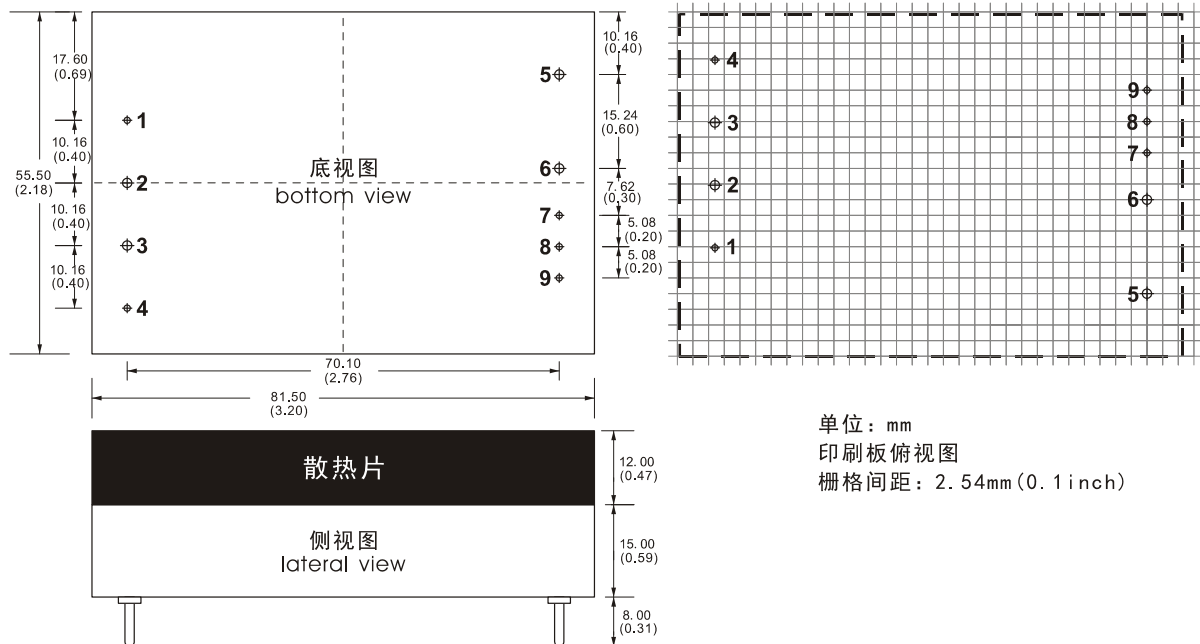
⑤	S: Single output D: dual output T: Triple output	W : Indicate wide range voltage input: 4:1
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### Typical product tabulates

TYPE	Input voltage range	Output voltage / current					
		VO1		VO2		VO3	
		V	mA	V	mA	V	mA
WD30-□S05	12 V (9~18V) 24V (18~36V) 48V (36~72V)	5V	6000mA				
WD30-□S12		12V	2500mA				
WD30-□S15		15V	2000mA				
WD30-□S24		24V	1250mA				
WD40-□S05	110V (72~144V)	5V	8000 mA				
WD40-□S12	12V (10~36V) W 48V (18~72V) W	12V	3300 mA				
WD40-□S15		15V	2670 mA				
WD40-□S24		24V	1660 mA				
WD50-□S05	12 V (9~18V)	5V	10000mA				
WD50-□S12	24V (18~36V) 48V (36~72V)	12V	4200mA				
WD50-□S15	110V (72~144V)	15V	3300mA				
WD50-□S24	12V (10~36V) W	24V	2100mA				

□Shows the nominal value of input voltage, due to space limitations ,the above list is only for some products, If demand for products out of above list, please contact the our sales department.

### Mechanical Data



单位: mm  
印刷板俯视图  
栅格间距: 2.54mm (0.1 inch)

注: 3、4、5、6、管脚针为1.5mm, 其余为1mm  
Note: 3, 4, 5, 6, pin  $\Phi$  1.5mm, others 1mm

## Mechanical Data

Package Code	L x W x H (unit): mm	Package No
M2	81.50 x 55.50 x 15.00	320218DC

## Pin Assignments

Pin No	1	2	3	4	5	6	7	8	9	
Single	FG	+Vin	-Vin	REM	Vout	GND	+S	TRIM	-S	

\*Note: The power modules such as the definition of the pin does not match with the data sheet ,please refer to the actual item.