

Sangmei 赛姆电子



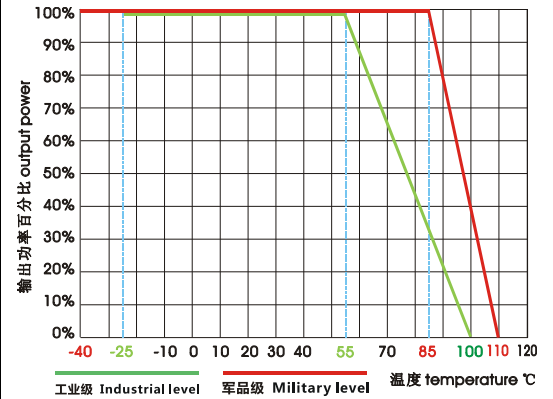
WD150-400 Series

DC/DC 宽压输入 150-400W (DC/DC wide input 150-400W)

Typical performance

- ◆ Wide Input voltage range (2:1 or 4:1)
- ◆ Typical Efficiency 87%
- ◆ Switching frequency: 300KHz ± 30 KHz
- ◆ Over current/Short circuit protection, Self-furbish
- ◆ Input-output isolate (1000/2000/4000 Vdc)
- ◆ 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
Vdc Input voltage	9	12	18	2:1
	18	24	36	2:1
	36	48	72	2:1
	72	110	144	2:1
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)	$\Delta V_o / \Delta t$	$\pm 4.0/500\mu s\%$
Voltage adjust	Nominal output	TRIM	$\pm 10\%$ (adjust)
Start delay time	Typical value		$\leq 200\text{mS}$

General

Efficiency	Nominal input, Full load	$V_o \leq 5.0\text{V}, 80\%$ (Typical)	$V_o > 5.0\text{V}, 87\%$ (Typical)
Switching frequency		300KHz (Typical)	Max 330KHz
Operating temperature	Free air	Industrial level	$-25^\circ\text{C} \sim +55^\circ\text{C}$
		Military level	$-40^\circ\text{C} \sim +85^\circ\text{C}$
Storage temperature		Industrial level	$-40^\circ\text{C} \sim +105^\circ\text{C}$
		Military level	$-55^\circ\text{C} \sim +120^\circ\text{C}$
Max case temperature		Industrial level	$+100^\circ\text{C}$
		Military level	$+110^\circ\text{C}$
Relative humidity			10%~90%
Case material			Metal case
Isolation Voltage	1000 /2000 /4000Vdc $\leq 0.5\text{mA}/1\text{min}$, 500Vdc $\leq 0.5\text{mA}/1\text{min}$		
(MTBF)	2×10^5 Hrs		

Product Nomination Method

Example	W D 250 – 48 S 24 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		W : Indicate wide range voltage input: 4:1

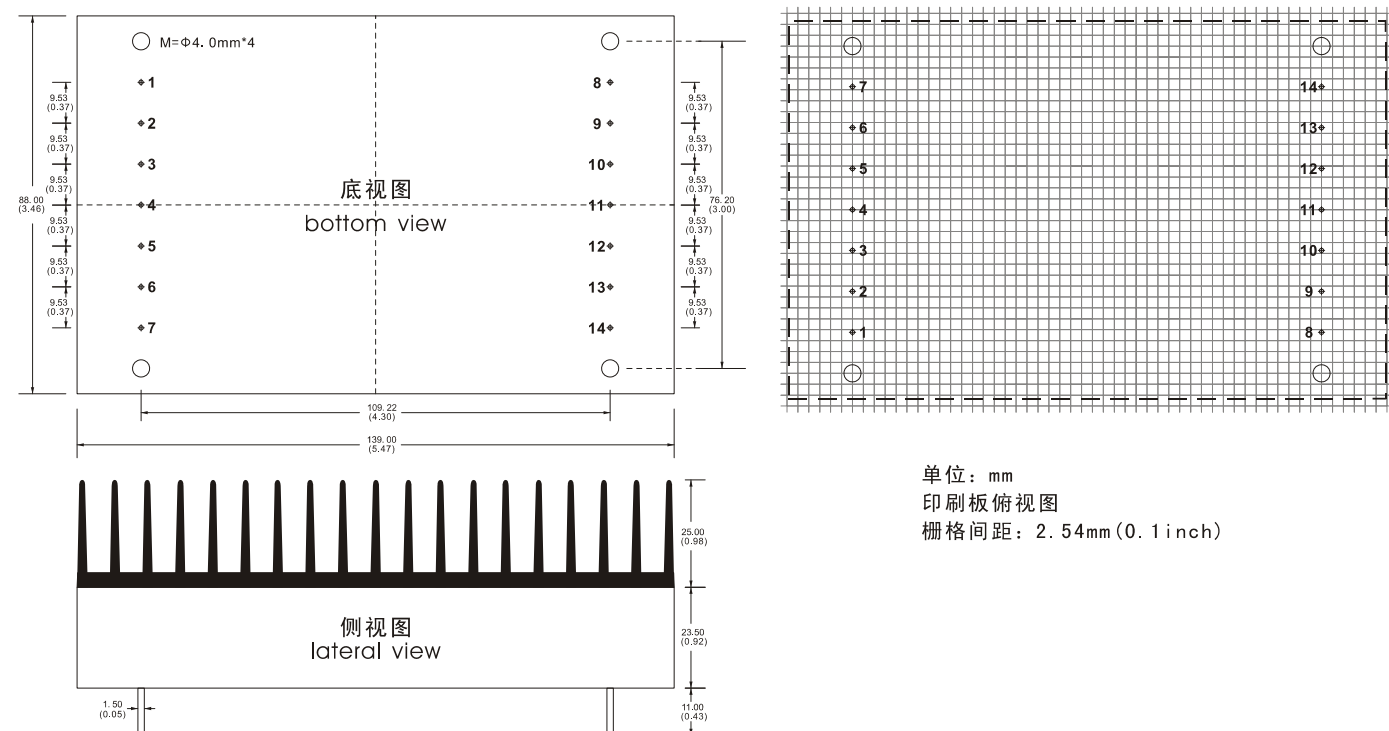
Typical product tabulates

TYPE	Input voltage range	Output voltage / current						
		VO1		VO2		VO3		
		V	A	V	A	V	A	
WD150-□S05	12 V (9~18V) (For below 250W)	5V	30A					
WD150-□S12		12V	12.5A					
WD150-□S24		24V	6.25A					
WD200-□S05		5A	40A					
WD200-□S12		12V	16.7A					
WD200-□S24		24V	8.3A					
WD250-□S12		12V	21A					
WD250-□S24		24V	10.5A					
WD300-□S12		24V (18~36V) 48V (36~72V) 110V (72~144V)	12V	25A				
WD300-□S24			24V	12.5A				
WD350-□S24			24V	14.6A				
WD350-□S48			48V	7.3A				
WD400-□S48	24V		8.3A					

注: □ 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.

□ Radiator and Air Cool are necessary when over 300W

Mechanical Data



Mechanical Data

Package Code	L x W x H (unit): mm	Package No
M5	139 x 88 x 23.5	547346DC

Pin Assignments

Pin No	1	2	3	4	5	6	7	8	9	10
Single	NP	-Vin	-Vin	+Vin	+Vin	REM	CASE	-Vo	-Vo	+Vo
	11	12	13	14						
	+Vo	-SENSE	TRIM	+SENSE						

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