

Sangmei



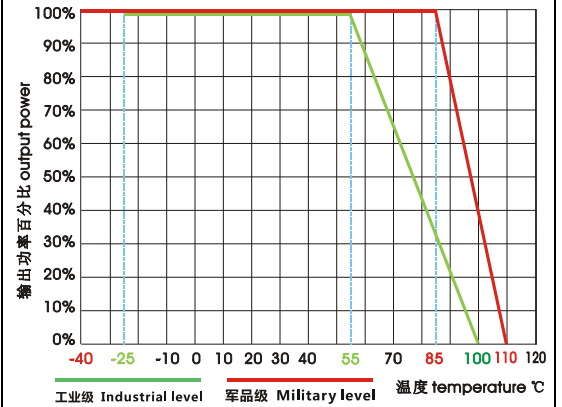
WD50-150 Series

DC/DC 宽压输入 50-150W (DC/DC wide input 50-150W)

Typical performance

- ◆ Wide Input voltage range (2:1)
- ◆ Typical Efficiency 87%
- ◆ 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
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;Vo2	±1.0%, ±2.0%
Line regulation	Nominal Load, full voltage range	Vo1;Vo2	±0.2%, ±1.5%
Load regulation	20% ~ 100% rated voltage	Vo1;Vo2	±0.5%, ±4.0%

Ripple and noise	20MHz BM (Full Load) $V_o \leq 5.0V, \leq 50mVp-p$; $V_o \geq 48V, \leq 180mVp-p$; Other, $\leq 100mVp-p$;		
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)
Turn-on delay time	Typical value		$\leq 200mS$

General

Efficiency	Nominal input, Full load	$V_o \leq 5.0V, 80\%$ (Typical)	$V_o > 5.0V, 87\%$ (Typical)
Switching frequency		300KHz (Typical)	Max 330KHz
Operating temperature	Free air	Industrial level	$-25^\circ C \sim +55^\circ C$
		Military level	$-40^\circ C \sim +85^\circ C$
Storage temperature		Industrial level	$-40^\circ C \sim +105^\circ C$
		Military level	$-55^\circ C \sim +120^\circ C$
Max case temperature		Industrial level	$+100^\circ C$
		Military level	$+110^\circ C$
Relative humidity			10%~90%
Case material			Metal case
Isolation Voltage	500/1000/1500/2000 Vdc $\leq 0.5mA/1min, 500Vdc \leq 0.5mA/1min$		
(MTBF)	2×10^5 Hrs		

Product Nomination Method

Example	W D 150 – 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

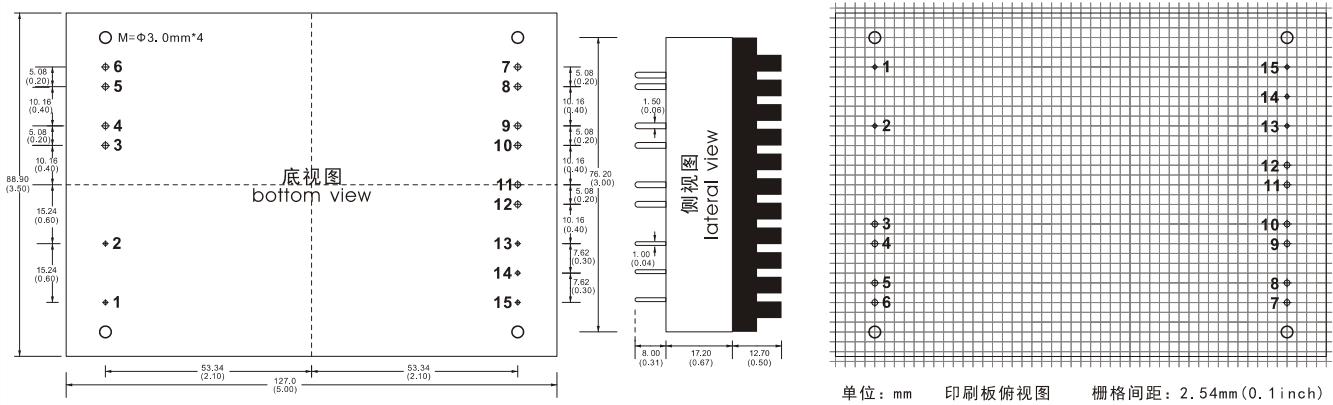
⑤	S: Single output D: dual output	W : Indicate wide range voltage input: 4:1
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Typical product tabulates

TYPE	Input voltage range	Output voltage / current					
		VO1		VO2		VO3	
		V	mA	V	mA	V	mA
WD50-□S05	12 V (9~18V) (Only for below 100W) 24V (18~36V) 48V (36~72V) 110V (72~144V)	5V	10A				
WD50-□S12		12V	4.2A				
WD50-□S24		24V	2.1A				
WD50-□D05		+5V	5A	-5V	5A		
WD50-□D12		+12V	2.1A	-12V	2.1A		
WD50-□D24		+24V	1.1A	-24V	1.1A		
WD75-□S05		5V	15A				
WD75-□S12		12V	6.25A				
WD75-□S24		24V	3.1A				
WD75-□D05		+5V	7.5A	-5V	7.5A		
WD75-□D12		+12V	3.1A	-12V	3.1A		
WD75-□D24		+24V	1.55A	-24V	1.55A		
WD100-□S12		12V	8.3A				
WD100-□S15		15V	6.6A				
WD100-□S24		24V	4.2A				
WD150-□S12		12V	12.5A				
WD150-□S15		15V	10A				
WD150-□S24		24V	6.25A				

□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



注：3、4、5、6、7、8、9、10、11、12管脚针为1.5mm,其余为1mm
 Note: 3, 4, 5, 6, 7, 8, 9, 10, 11, 12 pin Φ 1.5mm, others 1mm

单位：mm 印刷板俯视图 栅格间距：2.54mm (0.1 inch)

Mechanical Data

Package Code	L x W x H (unit): mm	Package No
M1	127.00 x 88.90 x 17.20	500350DC

Pin Assignments

Pin No	1	2	3:4	5:6	7:8	9:10	11:12	13	14	15
Single	REM	CASE	-Vin	+Vin	+Vout	GND	NP	+S	TRIM	-S
Dual	REM	CASE	-Vin	+Vin	+Vout1	COM	-Vout2	+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.