

Sangmei 爱浦电子



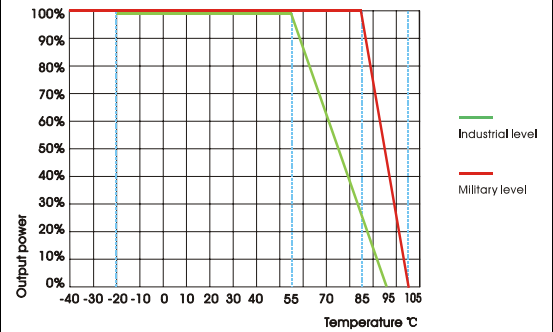
WD30-50 Series

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
- ⊙ Overcurrent/Short circuit protection, Self-furbish
- ⊙ Input-output isolate (500/1000/1500/2000Vdc)
- ⊙ PCB Board in-line type installs

Temperature graph



Technology parameter Test condition: General Nominal Line, Tc=25°C, Rated resistant load unless other wise specified

Input Features	Min	Nom	Max	Notes
Input voltage(Vdc)	9	12	18	W 2:1
	18	24	36	W 2:1
	36	48	72	W 2:1
	72	110	145	W 2:1
	10	12	36	W 4:1
	18	48	72	W 4:1
Turn on voltage	3.5Vdc		+Vin	converter guaranteed on when REM pin is left open
Turn off voltage	0		0.3Vdc	

Under voltage protect

Ouput Input voltage

Voltage accuracy		Vo1;Vo2,Vo3	±1.0%, ±2.0%
Line regulation		Vo1;Vo2,Vo3	±0.2%, ±1.5%
Load regulation	20% ~ 100%	Vo1;Vo2,Vo3	±0.5%, ±4.0%
Ripple and noise	20MHz BM Vo≤5.0V, ≤50mVp-p; Vo≥48V, ≤180mVp-p; Other, ≤100mVp-p;		
Dynamic response	25%	ΔVo1/Δt	±4.0/500us%
Voltage adjust	Standard output voltage	TRIM	±10% adjustable

Start delay time	typical		≤200mS
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General Features

Efficiency	Normal 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℃
Storage temperature		-40℃ ~ +105℃	
Max case temperature		+95℃	
Relative humidity			10%~90%
case material		Metal case	
Isolation Voltage	500/1000/1500/2000 Vdc ≤0.5mA/1min, 500Vdc ≤0.5mA/1min		
MTBF	2X10 ⁵ Hrs		

Product Nomination Method

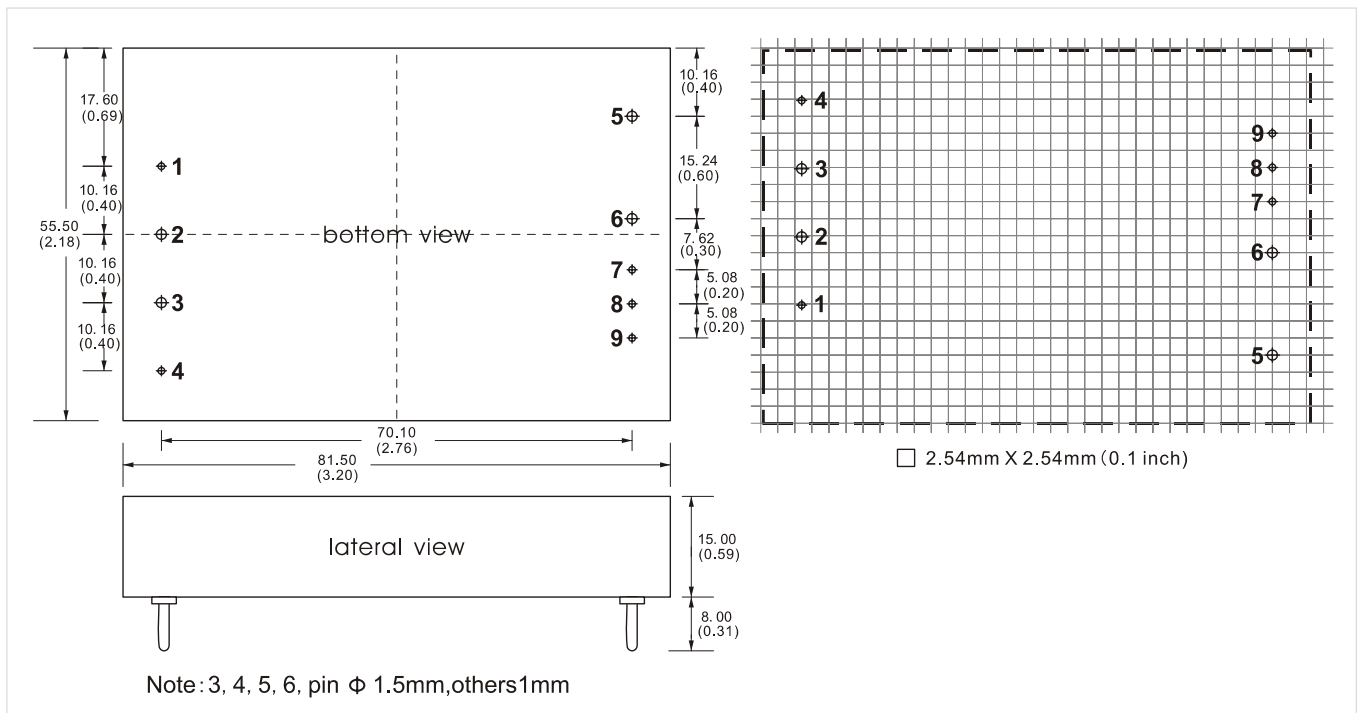
example	W D 25 - 48 S 05 J		
	① ② ③ ④ ⑤ ⑥ ⑦		
①	Wide input voltage: 2: 1	⑥	output voltage
②	Power adaptation mode: D (DC-DC)	⑦	J:military level,Non:Industry level
③	Output power(W)		G:input-output Isolate
④	Normal input voltage		I: Dual Route output Isolate
⑤	S=Single route output, D=Dual route output, T=Triple route output, Q=Quadruple output		W:Super Wide input voltage

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)	5V	6000mA				
WD30-□S12	24V (18~36V)	12V	2500mA				
WD30-□S15	48V (36~72V)	15V	2000mA				
WD30-□S24	110V (72~144V)	24V	1250mA				
WD30-□D05	12V (10~36V) W	+5V	3000mA	-5V	3000mA		
WD30-□D12	48V (18~72V) W	+12V	1250mA	-12V	1250mA		
WD40-□S05		5V	8000 mA				
WD40-□S12		12V	3300 mA				
WD40-□S15		15V	2670 mA				

WD40-□S24		24V	1660 mA				
WD40-□D05		+5V	4000 mA	-5V	4000 mA		
WD40-□D12		+12V	1660 mA	-12V	1660 mA		
WD50-□S05		5V	10000mA				
WD50-□S12		12V	4200mA				
WD50-□S15		15V	3300mA				
WD50-□S24		24V	2100mA				
WD50-□D05		+5V	5000mA	-5V	5000mA		
WD50-□D12		+12V	2100mA	-12V	2100mA		

Mechanical Data



Mechanical Data

Packing	L x W x H : mm	Packing No.
M2	81.50 x 55.50 x 15.00	320218DC

Pin Assignments

PIN NO.	1	2	3	4	5	6	7	8	9
S	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 hand book, please refer to the actual item.

