

Sangmei 赛姆电子



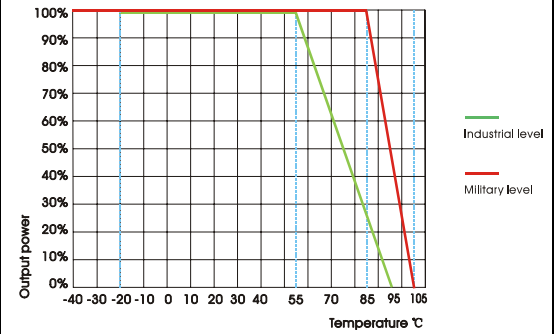
WD15-20 Series

DC/DC 宽压输入 15-20W (DC/DC wide input 15-20W)

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, $T_c=25^\circ\text{C}$, 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	144	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

Output Features

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%	$\Delta Vo1/\Delta t$	±4.0/500us%
Voltage adjust	Standard output voltage	TRIM	±10%(adjustable)

Start delay time	typical		≤200mS
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General Standard output voltage

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

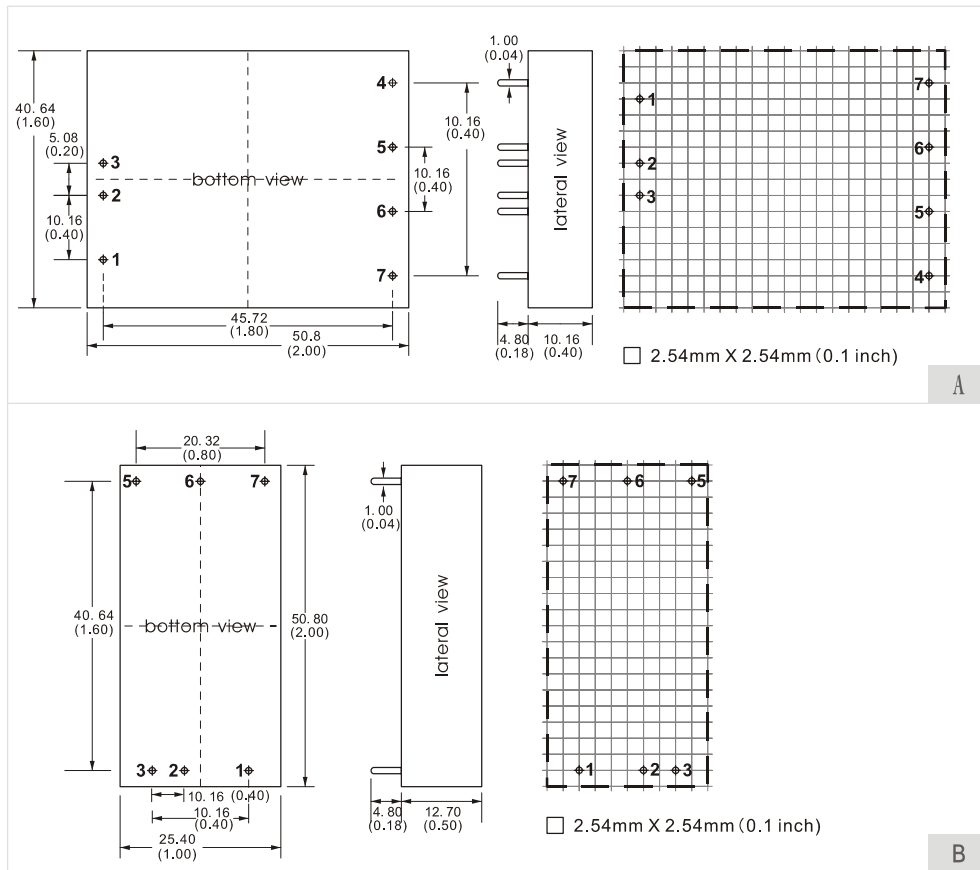
example	W D 25 - 48 S 05 J		
	① ② ③	④ ⑤ ⑥ ⑦	
①	Wide input voltage: 2: 1	⑥	output voltage
②	Power adaptation mode: D (DC-DC)	⑦	J:military level,Non:Industry level
③	Output power(W)		G:input-output Isolate
④	Normal input voltage		I: Dual Route output Isolate
⑤	S=Single route output, D=Dual route output, 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
WD15-□S3V3	12 V (9~18V)	3.3V	3000mA				
WD15-□S05	24V (18~36V)	5V	3000mA				
WD15-□S09	48V (36~72V)	9V	1600mA				
WD15-□S12	110V (72~144V)	12V	1250mA				
WD15-□S15	12V (10~36V) W	15V	1000mA				
WD15-□S24	48V (18~72V) W	24V	625mA				
WD15-□S48		48V	310mA				
WD20-□S3V3		3.3V	4000mA				

WD20-□S05		5V	4000mA				
WD20-□S09		9V	2220mA				
WD20-□S12		12V	1660mA				
WD20-□S15	12 V (9~18V) 24V (18~36V) 48V (36~72V) 110V (72~144V) 12V (10~36V) 48V (18~72V)	15V	1330mA				
WD20-□S24		24V	830mA				
WD20-□S48		48V	410 mA				
WD15-□D3V3		+3.3V	500 mA	-3.3V	500 mA		
WD15-□D05		+5V	500 mA	-5V	500 mA		
WD15-□D09		+9V	830 mA	-9V	830 mA		
WD15-□D12		+12V	625 mA	-12V	625mA		
WD15-□D15		+15V	500 mA	-15V	500 mA		
WD15-□D24		+24V	310 mA	-24V	310 mA		
WD20-□D3V3		+3.3V	2000 mA	-3.3V	2000 mA		
WD20-□D05		+5V	2000 mA	-5V	2000 mA		
WD20-□D09		+9V	1110 mA	-9V	1110 mA		
WD20-□D12		+12V	830 mA	-12V	830 mA		
WD20-□D15		+15V	660 mA	-15V	660 mA		
WD20-□D24		+24V	410 mA	-24V	410 mA		

Mechanical Data



Mechanical Data

Packing	L x W x H : mm	Packing No.
A	50.80 x 40.64 x 10.16	200160DC
B	50.80 x 25.40 x 12.70	200100DC

Pin Assignments

PIN NO.	1	2	3	4	5	6	7			
S	REM	-Vin	+Vin	NP	+Vout	GND	TRIM			
D	REM	-Vin	+Vin	+Vout1	COM	-Vout2	TRIM			

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