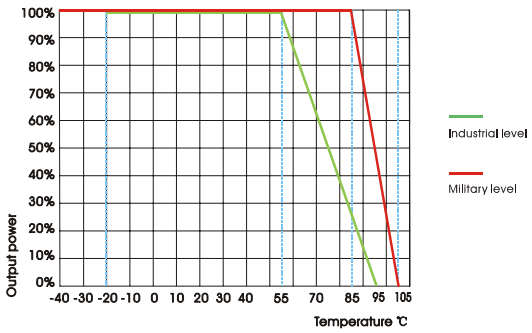
Typical performance

- ⊙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℃, Rated resistant load unless other wisespecified

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				

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%	△Vo1/△t	±4.0/500us%
Voltage adjust	Standard output voltage	TRIM	±10%(adjustable)
Start delay time	typical		≤200mS

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

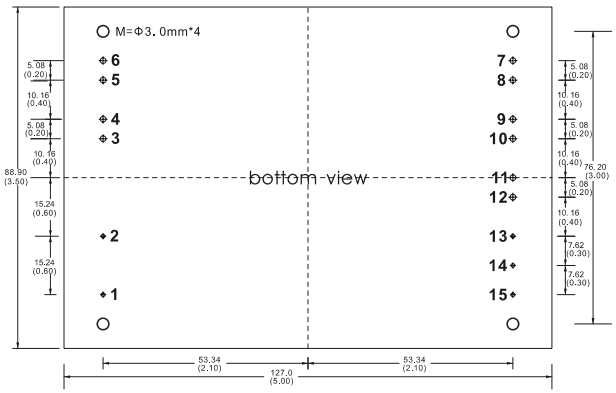
example	W D 50 – 48 S 05 J ① ② ③ ④ ⑤ ⑥ ⑦		
①	Wide voltage input：2：1	⑥	output voltage
②	Power adaptation mode：D（DC-DC）	⑦	J:military level,Non:Industry level
③	Output power(W)		G:input-output Isolate
④	Normal input voltage		I:Dual Route output Isolate
⑤	S=Single route output, D=Dual route output, T=Triple route output, Q=Quadruple output		W:Super Wide input voltage

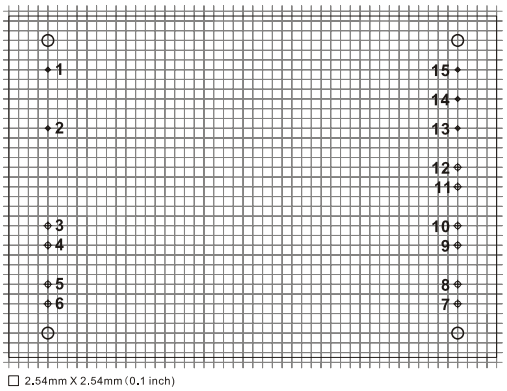
Typical product tabulates

TYPE	Input voltage range	Output voltage / current					
		VO1		VO2		VO3	
		V	mA	V	mA	V	mA
WD50-□S05	12 V（9~18V） 24V（18~36V） 48V（36~72V） 110V（72~144V） 12V（10~36V）W 48V（18~72V）W	5V	10A				
WD50-□S12		12V	4.2A				
WD50-□S24		24V	2.1A				
WD75-□S05		5V	15A				
WD75-□S12		12V	6.25A				
WD75-□S24		24V	3.1A				
WD100-□S05		5V	20A				
WD100-□S12		12V	8.3A				
WD100-□S15		15V	6.6A				
WD100-□S24		24V	4.2A				
WD150-□S05		5V	30A				

WD150-□S12		12V	12.5A				
WD150-□S24		24V	6.25A				

Mechanical Data





Note：3, 4, 5, 6, 7, 8, 9, 10, 11, 12 pin Φ 1.5mm,others1mm

Mechanical Data

Packing	L x W x H ： mm	Packing 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
S	REM	CASE	-Vin	+Vin	+Vout	GND	NP	+S	TRIM	-S
D	REM	CASE	-Vin	+Vin	+Vout1	COM	-Vout2	+S	TRIM	-S
T	REM	CASE	-Vin	+Vin	+Vout1	GND1	NP	+Vout2	COM	-Vout3
Q	REM	CASE	-Vin	+Vin	+Vout1	COM	-Vout2	+Vout3	COM	-Vout4

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