



# WD3-5 Series

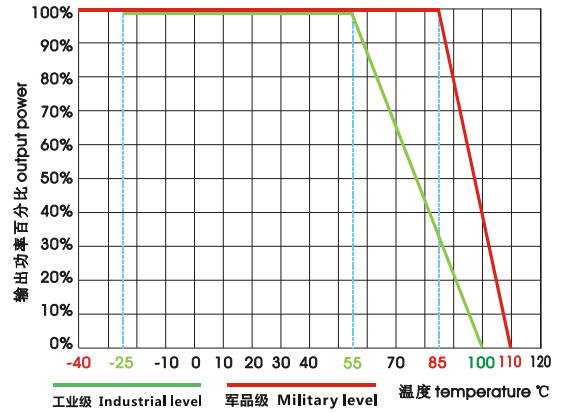
DC/DC 宽压输入 3-5W

(DC/DC wide input 3-5W)

## Typical performance

- ◆ Wide Input voltage range (2:1 or 4:1)
- ◆ Typical Efficiency 80%
- ◆ Switching frequency: 300KHz ± 30 KHz
- ◆ Short circuit protection, Self-furbish
- ◆ Input-output isolate (500/1000/1500Vdc)
- ◆ 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	4.5	5	9	2:1
	9	12	18	2:1
	18	24	36	2:1
	36	48	72	2:1
	72	110	144	2:1
	10	12	36	4:1
	18	48	72	4:1
Remote ON/OFF	Non			
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) 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	Non	
Turn-on delay time	Typical value		$\leq 200\text{mS}$

## General

Efficiency	Nominal input, Full load	$V_o \leq 5.0V, 78\%$ (Typical)	$V_o > 5.0V, 80\%$ (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	500/1000/1500 Vdc $\leq 0.5\text{mA}/1\text{min}$ , 500Vdc $\leq 0.5\text{mA}/1\text{min}$		
(MTBF)	$2 \times 10^5$ Hrs		

## Product Nomination Method

Example	W D 5 - 48 S 05 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			

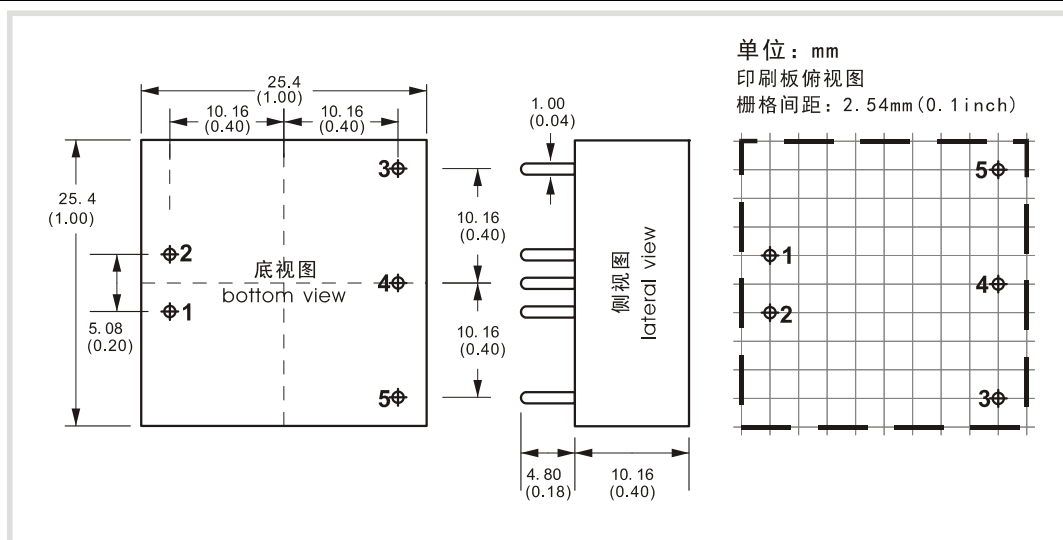
## Typical product tabulates

TYPE	Input voltage range	Output voltage / current					
		VO1		VO2		VO3	
		V	mA	V	mA	V	mA
WD3-□S3V3	5V (4.5~9V)	3.3V	600mA				
WD3-□S05	12V (9~18V)	5V	600mA				

WD3-□S09		9V	330mA				
WD3-□S12		12V	250mA				
WD3-□S15		15V	200mA				
WD3-□S24		24V	125mA				
WD5-□S3V3		3.3V	1000mA				
WD5-□S05		5V	1000mA				
WD5-□S09		9V	550mA				
WD5-□S12		12V	410mA				
WD5-□S15		15V	330mA				
WD5-□S24		24V	210mA				
WD3-□D3V3	5V (4.5~9V) 12V (9~18V) 24V (18~36V) 48V (36~72V) 110V (72~144V) 12V (10~36V) 48V (18~72V)	+3.3V	300 mA	-3.3V	300 mA		
WD3-□D05		+5V	300 mA	-5V	300 mA		
WD3-□D09		+9V	165 mA	-9V	165 mA		
WD3-□D12		+12V	125 mA	-12V	125 mA		
WD3-□D15		+15V	100 mA	-15V	100 mA		
WD3-□D24		+24V	60 mA	-24V	60 mA		
WD5-□D3V3		+3.3V	500 mA	-3.3V	500 mA		
WD5-□D05		+5V	500 mA	-5V	500 mA		
WD5-□D09		+9V	275 mA	-9V	275 mA		
WD5-□D12		+12V	205 mA	-12V	205 mA		
WD5-□D15		+15V	165 mA	-15V	165 mA		
WD5-□D24		+24V	100 mA	-24V	100 mA		

□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



## Mechanical Data

Package Code	L x W x H unit: mm	Package No
	25.40 x 25.40 x 10.16	100100DC

## Pin Assignments

Pin No	1	2	3	4	5				

Single	-Vin	+Vin	+Vout	NP	GND					
Dual	-Vin	+Vin	+Vout1	COM	-Vout2					

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