



# ND5 Series

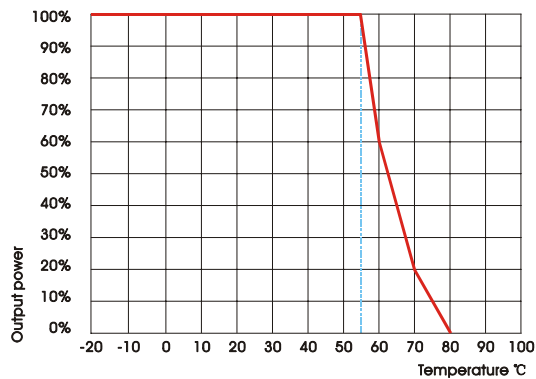
DC/DC 窄压输入 5W

(DC/DC narrow input 5W)

## Typical performance

- ⊙Narrow Range Input
- ⊙Typical Efficiency:60%
- ⊙Switching frequency: 50~ 100 KHz
- ⊙No Short-Circuit Protection
- ⊙Input-output isolate
- ⊙PCB Board in-line type installs
- ⊙Metal case, Low Output Ripple

## Temperature graph



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

Input Features	Min	Nom	Max	Notes
Input voltage(Vdc)	4.75	5	5.25	±5%
	5.70	6	6.30	±5%
	11.40	12	12.60	±5%
	14.25	15	15.75	±5%
	22.80	24	25.20	±5%
	45.60	48	50.40	±5%
Remote ON/OFF	Non			

## Output Features

Voltage accuracy		Vo1,Vo2	±3.0%
Line regulation		Vo1,Vo2	±1.0%
Load regulation	20% ~ 100%	Vo1,Vo2	±1.0%
Ripple and noise	20MHz BM typical	Vo≤50mVp-p	
Start delay time	typical		≤200mS

## General Features

Efficiency	Normal input , full load	Vo≤5.0V,50% typical	Vo>5.0V, 82% typical
Switching frequency		50~100KHz typical	max120KHz
Operating temperature		Free air	-10°C ~ +65°C

Storage temperature			-45°C ~ +105°C
Max case temperature			+80°C
Relative humidity			10%~90%
case material	Metal case		
Isolation Voltage	Input-case	Input-output	500Vdc ≤0.5mA/1min
MTBF	2X10 <sup>5</sup> Hrs		

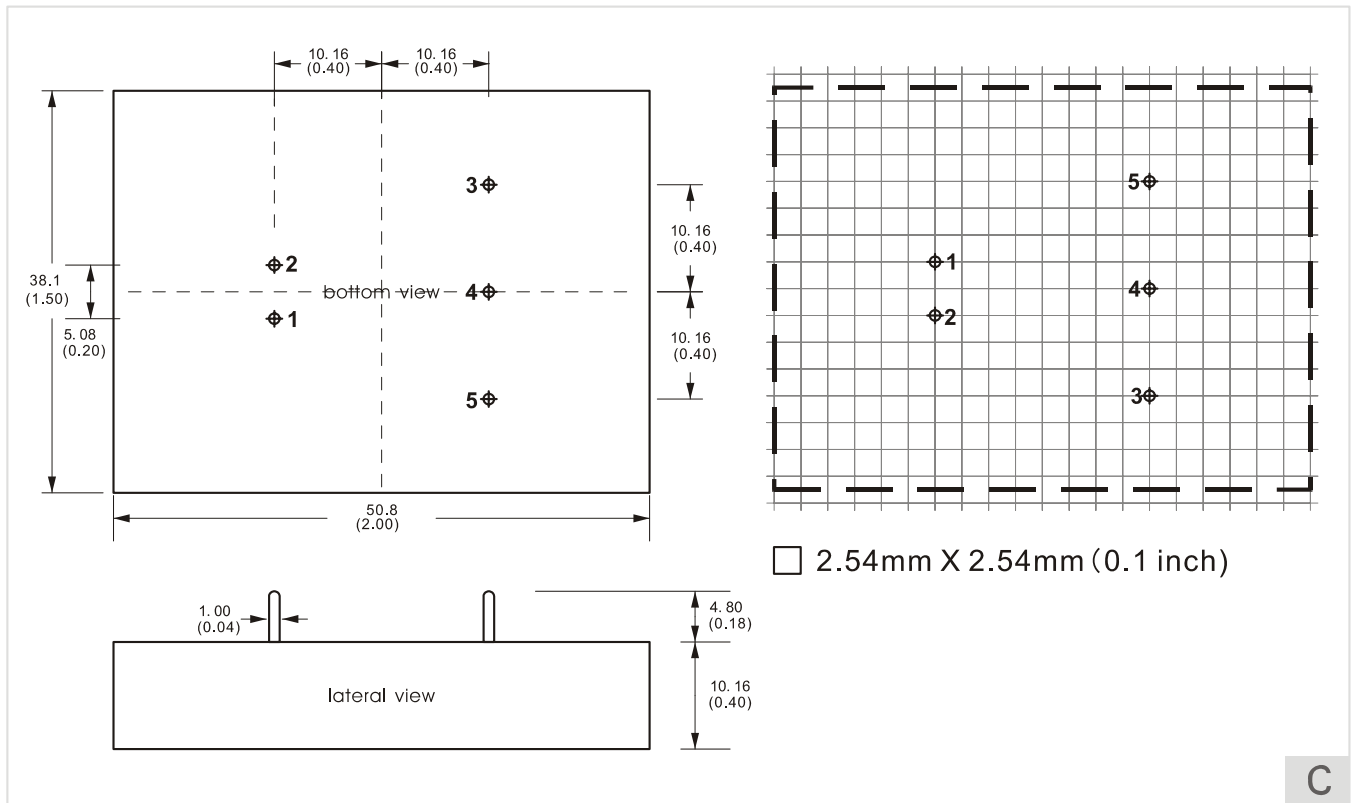
### Product Nomination Method

example	N D 5 - 48 S 05		
	① ② ③	④ ⑤ ⑥	
①	Narrow input: ±5% normal voltage	④	Normal input voltage
②	Power adaptation mode: D (DC-DC)	⑤	S=Single route output, D=Dual route output
③	Output power(W)	⑥	output voltage

### Typical product tabulates

TYPE	Input voltage range	Output voltage / current						
		VO1		VO2		VO3		
		V	mA	V	mA	V	mA	
ND5-□S05A	5V (4.75~5.25V) 6V (5.70~6.30V) 12V (11.40~12.60V) 15V (14.25~15.75V) 24V (22.80~25.20V) 48V (45.60~50.40V)	5V	1000mA					
ND5-□S09A		9V	560mA					
ND5-□S12A		12V	420mA					
ND5-□S15A		15V	330mA					
ND5-□S18A		18V	280mA					
ND5-□S24A		24V	200mA					
ND5-□S48A		48V	100mA					
ND5-□D05A		+5V	500 mA	-5V	500 mA			
ND5-□D09A		+9V	280mA	-9V	280mA			
ND5-□D12A		+12V	210 mA	-12V	210 mA			
ND5-□D15A		+15V	165 mA	-15V	165 mA			
ND5-□D18A		+18V	140 mA	-18V	140mA			
ND5-□D24A		+24V	100 mA	-24V	100 mA			
ND5-□D48A		+48V	50mA	-48V	50mA			
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## Mechanical Data



## Mechanical Data

Packing	L x W x H : mm	Packing No.
C	50.80 x 38.10 x 10.16	200150DC

## Pin Assignments

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

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