

<b>NDDY</b>	<b>PA(B)_MH-50W</b>	<b>50W, WIDE INPUT, ISOLATED &amp; REGULATED DUAL(SINGLE) OUTPUT DC/DC CONVERTER</b>
	<b>PRODUCT SPECIFICATION</b>	

● **FEATURES**

- Size: 50.8mm\*50.8mm\*11.8mm
- International standard pin-out
- Wide input voltage range(4:1)
- Low ripple & noise
- Short circuit protection
- ROHS compliant
- Isolation voltage: 1500VDC
- Operating temperature range:-40°C~+105°C
- 3 years warranty

● **DESCRIPTION**

This is a 50W DC/DC converter specifically designed for applications where input voltage range is large and the space is limited. It is widely used in communications equipment, power system, instrumentation, industrial control, intelligent equipment, and etc.

● **PRODUCT LIST**

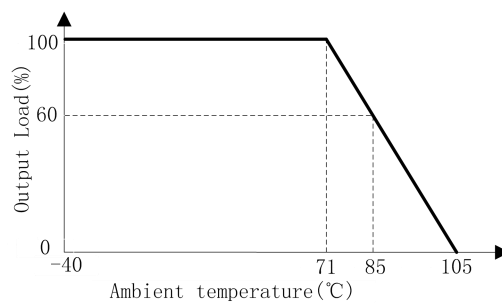
Product Name	Input Voltage / VDC		Output		EFF/% (TYP.)	Maximum CAP Load/uF
	Normal	Range	Voltage /VDC	Current/mA Max./Min.		
PA2412MH-50W	24	9~36	±12	±2080	88	2700
PA2415MH-50W			±15	±1670	88	1800
PB2405MH-40W			5	8000	90	10000
PB2412MH-50W			12	4160	89	4700
PB2415MH-50W			15	3330	89	3300
PB2424MH-50W			24	2080	89	3300
PA4812MH-50W	48	18~72	±12	±2080	88	2700
PA4815MH-50W			±15	±1670	88	1800
PB4805MH-40W			5	8000	90	10000
PB4812MH-50W			12	4160	89	4700
PB4815MH-50W			15	3330	89	3300
PB11005MH-40W	110	43-160	5	8000	90	10000
PB11012MH-50W			12	4160	89	4700
PB11024MH-50W			24	2080	89	3300

● **PRODUCT PARAMETERS**

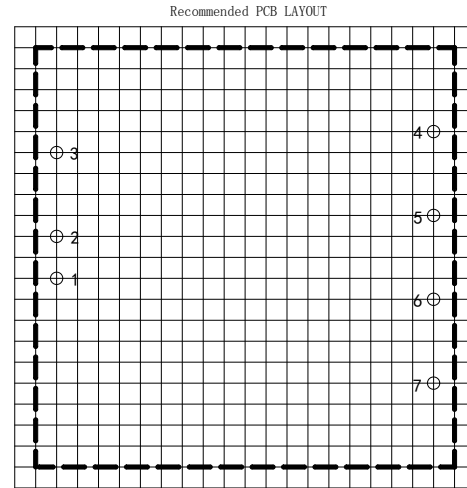
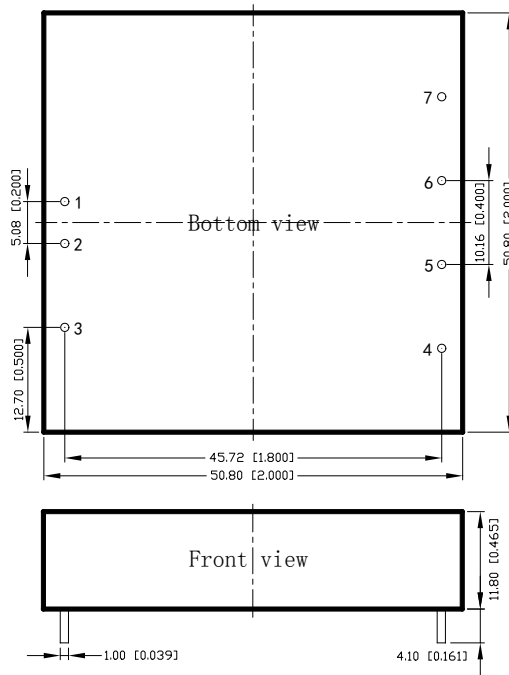
Parameter	Conditions / Description	Min	Nom	Max	Unit
Voltage accuracy	10%-100%Io	-	±1	±3	%
Load regulation	10%-100%Io	-	±0.5	±1	%
Line regulation	100%Io, input votagel range	-	±0.2	±0.5	%
Ripple & Noise	20MHz BW	-	120	-	mVp-p

Switching frequency	Nominal input voltage, 100%Io	-	300	-	kHz
SCP	Short circuit protection	Continuous, self-recovery			
Temperature coefficient	Nominal input voltage, 100%Io	-	0.02	-	%/°C
Operating temperature		-40	-	+85	°C
Storage temperature		-40	-	+125	°C
Storage humidity	No condensing	-	-	95	%RH
Cooling method		Natural air cooling			
Insulation voltage		1500	-	-	VDC
Insulation resistance	Input-output, 500VDC, 25°C, 70%RH	1000	-	-	MOhms
MTBF	MIL-HDBK-217F@25°C	100	-	-	KHours
Case material		aluminum			
Weight		-	50	-	g

● DERATING CURVE



## ● DIMENSIONS AND PIN ASSIGNMENT



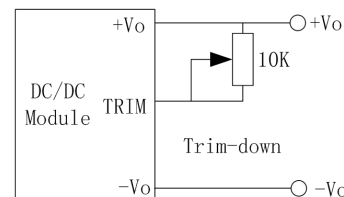
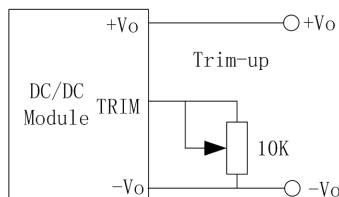
Note1: Grid is 2.54mm\*2.54mm  
 Note2: Hole diameter is advised 1.5mm

PIN	1	2	3	4	5	6	7
PA	Vin	GND	Ctrl	TRIM	-Vo	+Vo	NP
PB	Vin	GND	Ctrl	TRIM	-Vo	COM	+Vo

Unit: mm[inch]  
 Pin diameter tolerance:  $\pm 0.10[\pm 0.004]$   
 General tolerance:  $\pm 0.50[\pm 0.020]$

## ● SPECIAL PIN DESCRIPTION

1. TRIM is the output voltage trimming pin, with trimming range of  $\pm 10\%$ .



2. Positive Logic Control on/off.

Item	Description
Logic Compatibility	CMOS or Open Collector TTL
Module ON	$> +3.5$ to $V_{in,max}$ VDC, or Open Circuit
Module OFF	$< 1.2$ VDC

## ● NOTES

1. Unless otherwise specified, data in this specification is tested with nominal input voltage, rated output load, and  $T_a=25^\circ\text{C}$ , humidity $<75\%$ RH.
2. All data testing methods are based on Guangzhou NengDa company standards.
3. Specification of the product may be subject to change without prior notice.
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