

# NDDY

## WRA (B) \_MD-25W

### PRODUCT SPECIFICATION

### 20-25W, WIDE INPUT, ISOLATED & REGULATED DUAL(SINGLE) OUTPUT DC/DC CONVERTER

#### ● FEATURES

- Size: 50.8mm\*40.6mm\*11.8mm
- International standard pin-out
- Wide input voltage range(2:1)
- Low ripple & noise
- Short circuit protection
- ROHS compliant
- Isolation voltage: 1500VDC
- Operating temperature range:-40℃~+85℃
- 3 years warranty



#### ● DESCRIPTION

This is a 20-25W 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

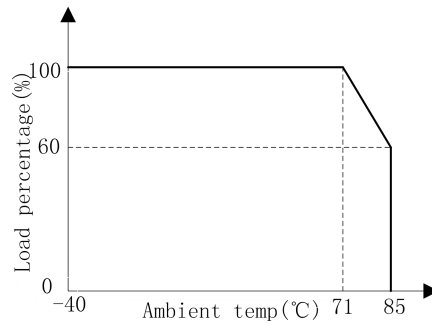
Product Name	Input Voltage / VDC		Output		EFF/% (TYP.)	Maximum CAP Load/uF
	Normina 1	Range	Voltage /VDC	Current/mA Max./Min.		
RA1205MD-20W	12	9~18	±5	±2.0	80	2000
RA1212MD-20W			±12	±0.83	82	1000
RA1215MD-20W			±15	±0.66	83	820
RB1205MD-20W	12	9~18	5	4.0	79	4000
RB1212MD-20W			12	1.66	81	2000
RB1215MD-20W			15	1.33	82	1000
RA2405MD-20W	24	18~36	±5	±2.0	81	2000
RA2412MD-20W			±12	±0.83	83	1000
RA2415MD-20W			±15	±0.66	84	820
RB2405MD-20W	24	18~36	5	4.0	82	4000
RB2412MD-20W			12	1.66	84	2000
RB2415MD-20W			15	1.33	85	1000
RB2424MD-20W			24	0.83	85	1000
R48405MD-20W	48	36~72	±5	±2.0	82	2000
RA4812MD-20W			±12	±0.83	85	1000
RB4805MD-20W	48	36~72	5	4.0	82	4000
RB4812MD-20W			12	1.66	84	2000
RB4815MD-20W			15	1.33	85	1000
RB4824MD-20W			15	1.33	85	1000
RA1205MD-25W	12	9~18	±5	±2.5	81	2000
RA1212MD-25W			±12	±1.04	83	1000
RA1215MD-25W			±15	±0.83	84	820

RB1205MD-25W	12	9~18	5	5.0	80	4000
RB1212MD-25W			12	2.08	82	2000
RB1215MD-25W			15	1.55	83	1000
RA2405MD-25W	24	18~36	±5	±2.5	82	2000
RA2412MD-25W			±12	±1.04	84	1000
RA2415MD-25W			±15	±0.83	85	820
RB2405MD-25W	24	18~36	5	5.0	83	4000
RB2412MD-25W			12	2.08	85	2000
RB2415MD-25W			15	1.55	86	1000
RB2424MD-25W			24	1.04	86	1000
R48405MD-25W	48	36~72	±5	±2.5	83	2000
RA4812MD-25W			±12	±1.04	86	1000
RA4815MD-25W			±15	±0.83	87	820
RB4805MD-25W	48	36~72	5	5.0	83	4000
RB4812MD-25W			12	2.08	85	2000
RB4815MD-25W			15	1.55	86	1000
RB4824MD-25W			24	1.04	86	1000
RB11012MD-25W	110	72-144	12	2.08	85	2000
RB11024MD-25W			24	1.04	86	1000

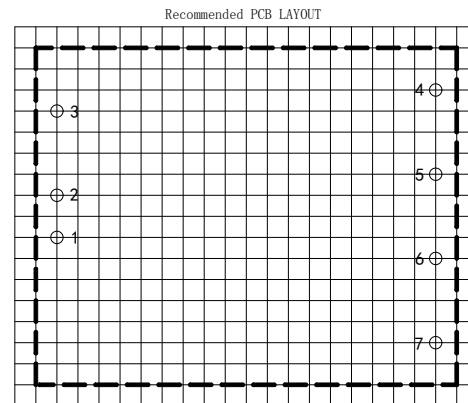
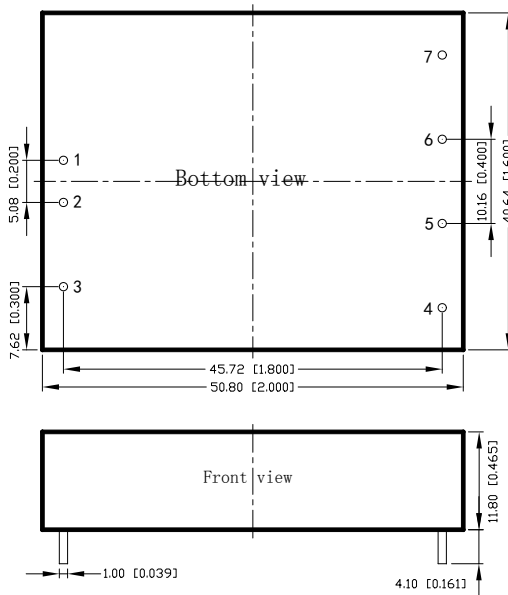
● PRODUCT PARAMETERS

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	±1	%	
Ripple & Noise	20MHz BW	5Vo	-	50	-	mVp-p
		Other output	-	100	-	
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		-	35	-	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
RA	V <sub>in</sub>	GND	Ctrl	NP	0V	+V <sub>o</sub>	NP
RB	V <sub>in</sub>	GND	Ctrl	NP	-V <sub>o</sub>	0V	+V <sub>o</sub>

Unit: mm[inch]  
 Pin diameter tolerance: ±0.10[±0.004]  
 General tolerance: ±0.50[±0.020]

● NOTES

1. Unless otherwise specified, data in this specification is tested with nominal input voltage, rated output load, and Ta=25°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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