

NDDY	WRA (B) _MD-6W	6W, WIDE INPUT, ISOLATED & REGULATED DUAL(SINGLE) OUTPUT DC/DC CONVERTER
	PRODUCT SPECIFICATION	

● **FEATURES**

- Size: 25.4mm*25.4mm*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 6W 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**

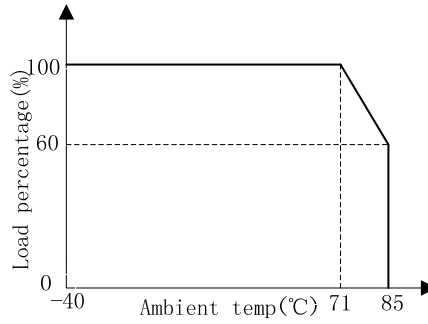
Product Name	Input Voltage / VDC		Output		EFF/% (TYP.)	Maximum CAP Load/uF
	Norminal	Range	Voltage /VDC	Current/mA Max./Min.		
WRA0505MD-5W	5	4.5-9	±5	±500	72	100
WRA0512MD-5W			±12	±200	73	47
WRA0515MD-5W			±15	±166	73	47
WRB0505MD-5W			5	1000	70	220
WRB0512MD-5W			12	416	72	82
WRB0515MD-5W			15	333	72	82
WRA1205MD-6W	12	9~18	±5	±600	80	470
WRA1209MD-6W			±9	±333	81	330
WRA1212MD-6W			±12	±250	81	330
WRA1215MD-6W			±15	±200	82	220
WRB1203MD-5W	12	9~18	3.3	1500	78	1000
WRB1205MD-6W			5	1200	79	1000
WRB1209MD-6W			9	666	80	470
WRB1212MD-6W			12	500	80	470
WRB1215MD-6W			15	400	81	330
WRB1218MD-6W			18	333	81	330
WRB1224MD-6W			24	250	82	220
WRA2405MD-6W	24	18~36	±5	±600	81	470
WRA2412MD-6W			±12	±250	82	330
WRA2415MD-6W			±15	±200	83	220
WRB2403MD-5W	24	18~36	3.3	1500	78	1000

WRB2405MD-6W			5	1200	80	1000
WRB2412MD-6W			12	500	81	470
WRB2415MD-6W			15	400	82	330
WRB2424MD-6W			24	250	83	220
WRA4805MD-6W	48	36~72	±5	±600	82	470
WRA4812MD-6W			±12	±250	84	330
WRB4805MD-6W	48	36~72	5	1200	81	1000
WRB4812MD-6W			12	500	83	470
WRB4815MD-6W			15	400	84	330
WRB4824MD-6W			24	250	85	220
WRB11005MD-6W	110	72~144	5	1200	81	1000
WRB11012MD-6W			12	500	83	470
WRB11015MD-6W			15	400	85	330
WRB11024MD-6W			24	250	86	220

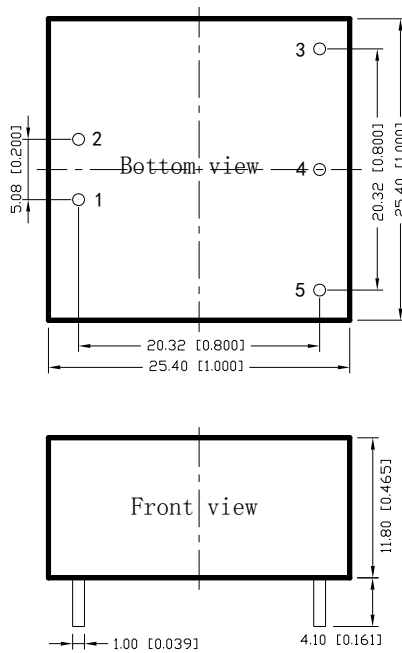
● PRODUCT PARAMETERS

Parameter	Conditions / Description	Min	Nom	Max	Unit	
Voltage accuracy	3.3Vo 5Vo	-	±2	±5	%	
	Other output	-	±1	±3	%	
Load regulation	10%-100%Io	-	±0.5	±1	%	
Line regulation	100%Io, input votagel range	-	±0.2	±1.0	%	
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		-	14	-	g	

● DERATING CURVE



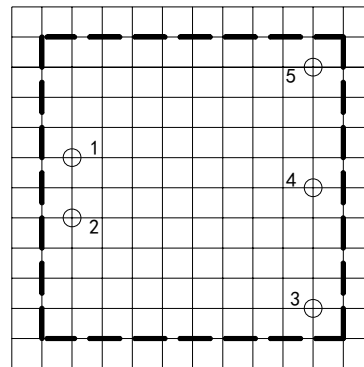
● DIMENSIONS AND PIN ASSIGNMENT



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

Pin	1	2	3	4	5
WRB	GND	Vin	+Vo	No Pin	0V
WRA	GND	Vin	+Vo	0V	-Vo

Recommended PCB LAYOUT



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

● 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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