

# NDDY

## N78XX-1000

### PRODUCT SPECIFICATION

1.0A, WIDE INPUT,  
NON-ISOLATED & REGULATED  
SINGLE OUTPUT  
DC/DC CONVERTER

#### ● FEATURES

- Size: 17.6\*11.6mm\*9.0mm
- International standard pin-out
- Wide input voltage range
- Low ripple & noise
- Short circuit protection
- ROHS compliant
- Operating temperature range: -40°C ~ +85°C
- 3 years warranty



#### ● DESCRIPTION

This is a high efficiency switching regulator which is designed to replace LM78XX series three-terminal linear regulator. It is widely used in communications equipment, power system, instrumentation, industrial control, intelligent equipment, and etc.

#### ● PRODUCT LIST

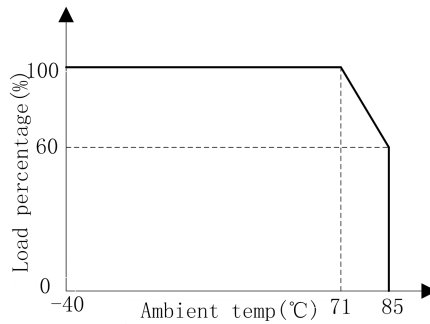
Product Name	Input Voltage / VDC		Output		EFF/% (TYP.)	
	Norminal	Range	Voltage/VDC	Current/mA	@Vin Min	@Vin Max
N7803-1000	24	6.5~32	3.3	1000	86	81
N7805-1000	24	6.5~32	5	1000	90	82
	12	6.5~27	-5	-800	78	68
N7809-1000	24	11~32	9	1000	90	82
	12	7~23	-9	-400	80	70
N7812-1000	24	15~32	12	1000	91	83
	12	7~20	-12	-400	82	71
N7815-1000	24	18~32	15	1000	92	84
	12	7~17	-15	-400	82	71

#### ● PRODUCT PARAMETERS

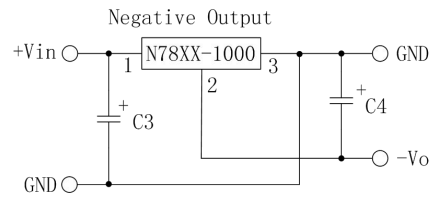
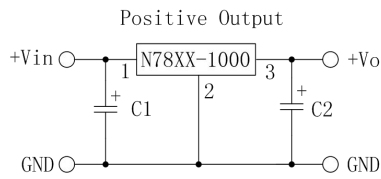
Parameter	Conditions / Description	Min	Nom	Max	Unit
Voltage accuracy	10%-100%Io	-	±2	±5	%
Load regulation	10%-100%Io	-	±0.5	±1	%
Line regulation	100%Io, input votagel range	-	±0.2	±0.5	%
Ripple & Noise	20MHz BW	-	50	80	mVp-p
Switching frequency	Nominal input voltage, 100%Io	-	330	-	kHz
SCP	Short circuit protection	Continuous, self-recovery			
Temperature coefficient	Nominal input voltage, 100%Io	-	0.02	-	%/°C
Operating temperature		-40	-	+85	°C
Storage		-40	-	+125	°C

temperature					
Storage humidity	No condensing	-	-	95	%RH
Cooling method		Natural air cooling			
Insulation resistance	Input-output, 500VDC, 25°C, 70%RH	1000	-	-	MOhms
MTBF	MIL-HDBK-217F@25°C	100	-	-	KHours
Case material		Black flame retardant plastic			
Weight		-	4.0	-	g

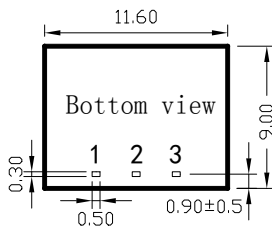
● DERATING CURVE



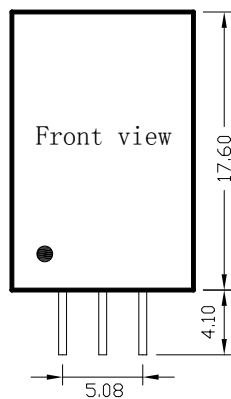
● TYPICAL APPLICATION



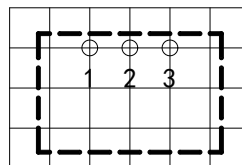
● DIMENSIONS AND PIN ASSIGNMENT



PIN	1	2	3
FUN	+Vin	GND	+Vo



Recommended PCB LAYOUT



Note1: Grid is 2.54mm\*2.54mm  
 Note2: Hole diameter is advised 1.0mm

Unit: mm  
 General tolerance: ±0.25

● 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.
4. All right reserved by Guangzhou NengDa Power Supply Technology Co., Ltd.