





## Features:

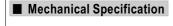
- Wide 4:1 DC input range
- Protections: Short circuit / Overload / Over voltage
- 1500VDC I/O isolation
- Built-in EMI filter
- Cooling by free air convection
- Output voltage trimming function
- Built-in remote ON-OFF control
- 100% full load burn-in test
- Lost cost
- High reliability

# **SPECIFICATION**

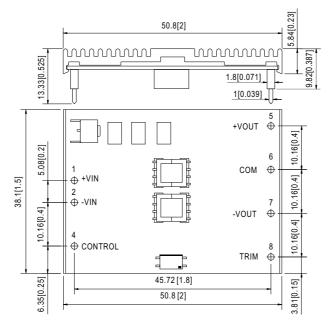
(€

MODEL		NSD15-12D5		NSD15-12D12		NSD15-12D15		NSD15-48D5		NSD15-48D12		NSD15-48D15	
	DC VOLTAGE	5V	-5V	12V	-12V	15V	-15V	5V	-5V	12V	-12V	15V	-15V
OUTPUT	RATED CURRENT	1.5A	1.5A	0.62A	0.62A	0.5A	0.5A	1.5A	1.5A	0.62A	0.62A	0.5A	0.5A
	CURRENT RANGE	0.07 ~ 1.5A	0.07 ~ 1.5A	0.03 ~ 0.62A	0.03 ~ 0.62A	0.02 ~ 0.5A	0.02 ~ 0.5A	0.07 ~ 1.5A	0.07 ~ 1.5A	0.03 ~ 0.62A	0.03 ~ 0.62A	0.02 ~ 0.5A	0.02 ~ 0.5
	RATED POWER	15W											
	RIPPLE & NOISE (max.) Note.2												
	VOLTAGE TOLERANCE Note.3	±3.0%		±2.0% ±2.0%			±3.0% ±2.0%			±2.0%			
	LINE REGULATION	±1.0% at 1	0% ~ 100%	load									
	LOAD REGULATION	±2.0%		±1.0%		±1.0%		±2.0%		±1.0%		±1.0%	
	RATED DC INPUT	12VDC						48VDC					
INPUT	VOLTAGE RANGE Note.6	9.4 ~ 36VE	C					18 ~ 72VDC					
	EFFICIENCY (Typ.)	76%		80%				80% 84%			84%		
	DC CURRENT	1.8A/12V[	DC					0.4A/48VE	C				
	SHUTDOWN IDLE CURRENT	20mA											
PROTECTION	OVERLOAD	Above 105% rated output power											
		Protection type: Over power limiting, recovers automatically after fault condition is removed											
	OVER VOLTAGE(CLAMP)				13.8 ~ 18V   -13.8 ~ -18V   17.3 ~ 22.5V   -17.3 ~ -22.5V   7.25 ~ 9V   -7.25 ~ -9V   13.8 ~ 18V   -13.8 ~ -18V   17.3 ~ 22.5V   -17.3 ~ -22.5V								
	SHORT CIRCUIT Note.4												
FUNCTION	ON/OFF CONTROL	Logic "1" OPEN: ON, logic "0" GND: OFF											
ENVIRONMENT	WORKING TEMP.	-25 ~ +70°C											
	WORKING HUMIDITY	0% ~ 95% RH max.											
	STORAGE TEMP., HUMIDITY	-40 ~ +85°C, 0 ~ 95% RH											
	TEMP. COEFFICIENT	±0.03%/℃ (0~50℃)											
	SAFETY STANDARDS	Design refer to UL60950-1, TUV EN60950-1											
SAFETY &	ISOLATION VOLTAGE	I/P-O/P:1.5KVDC											
EMC	ISOLATION RESISTANCE	I/P-O/P:100M Ohms/500VDC 25°C 70%RH											
(Note 5)	EMI CONDUCTION & RADIATION	Compliance to EN55022 (CISPR22) Class B											
	EMS IMMUNITY	Complian	ce to EN61	000-4-2,3	,4,6,8; EN	55024, LigI	nt industry	level, crite	ria A				
OTHERS	MTBF	1673.1K hrs min. MIL-HDBK-217F (25°C)											
	DIMENSION	38.1*50.8*9.82mm (1.5"*2"*0.387") (L*W*H)											
	PACKING	0.03Kg; 180pcs/6.4Kg/0.97CUFT											
NOTE	2. Ripple & noise are measured 3. Tolerance: includes set up to 4. Short circuit not more than 6 5. The power supply is conside EMC directives. 6. Derating to 80% load is need 7. EMC filter suggestion:  800H Vin 680uF PSU	ng to 80% load is needed for NSD15-48D series at 18Vdc input voltage. Full output wattage can be acquired when the input voltage is higher than 20Vdc. iter suggestion:											





Unit:mm[inch]

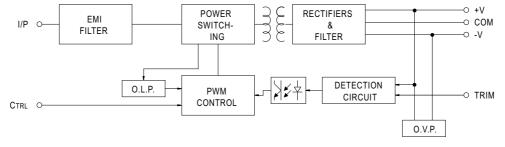


Pin No. Assignment

Pin No.	Assignment	Pin No.	Assignment			
1	+VIN	5	+VOUT			
2	-VIN	6	COMMON			
3	No Pin	7	-VOUT			
4	CONTROL	8	TRIM			

## **■** Block Diagram

fosc: 400KHz



## **■** Derating Curve

# 100 80 75 60 40 20 -25 0 10 20 30 40 50 60 70 (HORIZONTAL) AMBIENT TEMPERATURE (°C)

## ■ ON/OFF Control & Output Trim

OFF.....+2.5VDC max. OR SHORT TO PIN2

