



15W DC-DC Regulated Dual Output

NSD15-D series



■ 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
- 2 years warranty



TPTC004

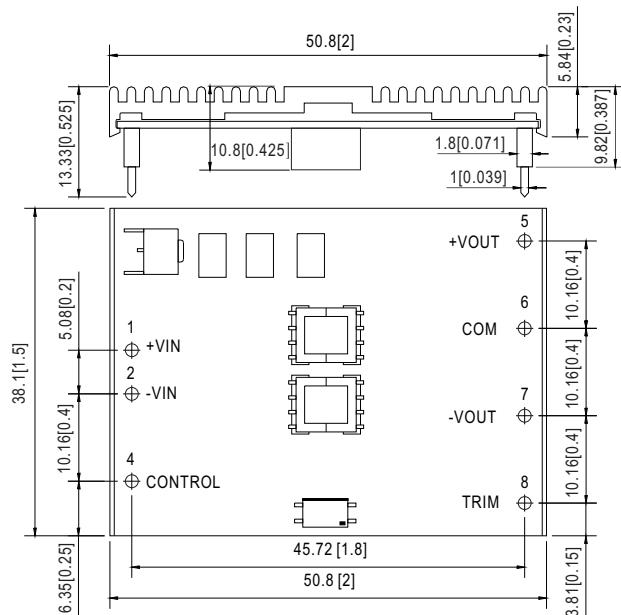
UL62368-1

SPECIFICATION

MODEL	NSD15-12D5	NSD15-12D12	NSD15-12D15	NSD15-48D5	NSD15-48D12	NSD15-48D15										
OUTPUT	DC VOLTAGE	5V	-5V	12V	-12V	15V	-15V	5V	-5V	12V	-12V	15V	-15V			
	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 ~ 0.5A			
	RATED POWER	15W		14.88W		15W		15W		14.88W		15W				
	CAPACITIVE LOAD (max.)	±1000uF														
	RIPPLE & NOISE (max.) Note.2	100mVp-p(25% ~ 100% load)														
	VOLTAGE TOLERANCE Note.3	±3.0%	±2.5%	±2.5%	±3.0%	±2.5%	±2.5%	±2.5%	±2.5%	±2.5%	±2.5%	±2.5%	±2.5%			
	LINE REGULATION	±1.0% at 10% ~ 100% load														
	LOAD REGULATION	±2.0%	±1.0%	±1.0%	±2.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%			
	TRIM OUTPUT (Typ.)	±5.0%	±5.0%	±3.0%	±5.0%	±5.0%	±5.0%	±5.0%	±5.0%	±5.0%	±5.0%	±5.0%	±3.0%			
INPUT	SETUP TIME	100ms/RATED DC INPUT at full Load														
	RATED DC INPUT	12VDC				48VDC										
	VOLTAGE RANGE Note.6	9.4 ~ 36VDC				18 ~ 72VDC										
	EFFICIENCY (Typ.)	76%	80%	80%	80%	80%	84%	84%	84%	84%	84%	84%	84%	84%		
	DC CURRENT	1.8A/12VDC				0.4A/48VDC										
	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)	7.25 ~ 9V	-7.25 ~ -9V	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	Recover automatically after fault condition is removed														
FUNCTION	ON/OFF CONTROL	Logic "1" or open circuit : ON Logic "0" or short to PIN2 : OFF														
ENVIRONMENT	WORKING TEMP.	-25 ~ +70°C														
	WORKING HUMIDITY	0% ~ 95% RH max.														
SAFETY & EMC (Note 5)	STORAGE TEMP., HUMIDITY	-40 ~ +85°C, 0 ~ 95% RH														
	TEMP. COEFFICIENT	±0.03%/°C (0~50°C)														
OTHERS	SAFETY STANDARDS	UL62368-1, EAC TP TC 004 approved, Design refer to BS EN/EN62368-1														
	ISOLATION VOLTAGE	I/P-O/P:1.5KVDC														
	ISOLATION RESISTANCE	I/P-O/P:100M Ohms / 500VDC / 25°C / 70% RH														
	EMC EMISSION	Compliance to BS EN/EN55032 (CISPR32) Class B, EAC TP TC 020														
NOTE	EMC IMMUNITY	Compliance to BS EN/EN61000-4-2,3,4,6,8; BS EN/EN55024, light industry level, criteria A, EAC TP TC 020														
	MTBF	1673.1K hrs min. MIL-HDBK-217F (25°C)														
	DIMENSION	50.8*38.1*9.82mm (2**1.5**0.387") (L*W*H)														
NOTE	PACKING	0.03Kg; 180pcs/6.4Kg/0.94CUFT														
	1.	All parameters NOT specially mentioned are measured at 12, 48VDC input, rated load and 25°C of ambient temperature.														
	2.	Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uF & 47uF parallel capacitor.														
	3.	Tolerance : includes set up tolerance, line regulation and load regulation.														
	4.	Short circuit no more than 60 seconds.														
	5.	The power supply is considered a component which will be installed into a final equipment. All the EMC tests are been executed by mounting the unit on a 230mm*230mm metal plate with 1mm of thickness. The final equipment must be re-confirmed that it still meets EMC directives. For guidance on how to perform these EMC tests, please refer to "EMI testing of component power supplies." (as available on http://www.meanwell.com)														
	6.	Derating 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.														
	7.	EMC filter suggestion:														
NOTE																
	8.	The ambient temperature derating of 3.5°C/1000m with fanless models and of 5°C/1000m with fan models for operating altitude higher than 2000m(6500ft).														
※ Product Liability Disclaimer : For detailed information, please refer to https://www.meanwell.com/serviceDisclaimer.aspx																

■ Mechanical Specification

Unit:mm[inch]

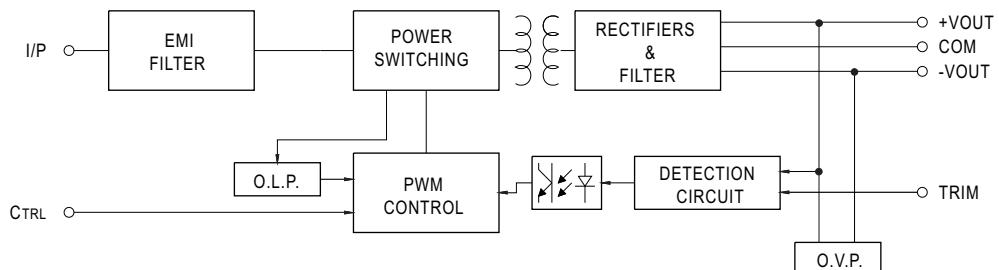


Pin No. Assignment

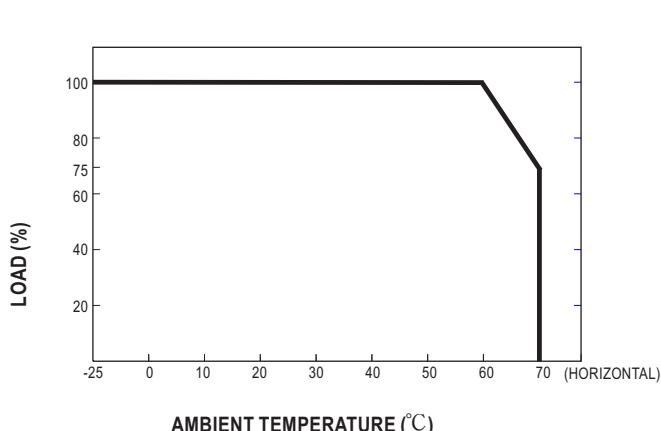
Pin No.	Assignment	Pin No.	Assignment
1	+VIN	5	+VOUT
2	-VIN	6	COMMON
3	No Pin	7	-VOUT
4	CONTROL	8	TRIM

■ Block Diagram

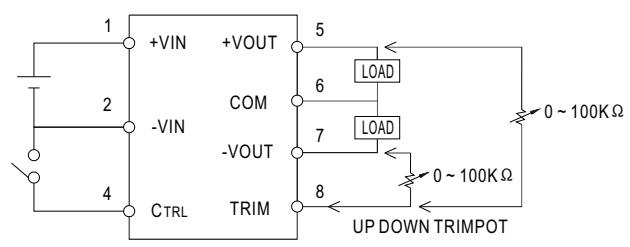
fosc : 400KHz



■ Derating Curve



■ ON/OFF Control & Output Trim



CONTROL INPUT.....PIN4

CONTROL COMMON.....PIN2

LOGIC COMPATIBILITY.....CMOS OR OPEN COLLECTOR TTL

CONTROL VOLTAGE

ON.....+5.5VDC min. OR OPEN CIRCUIT

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