

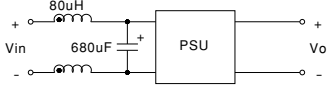
NSD15-S series



- 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

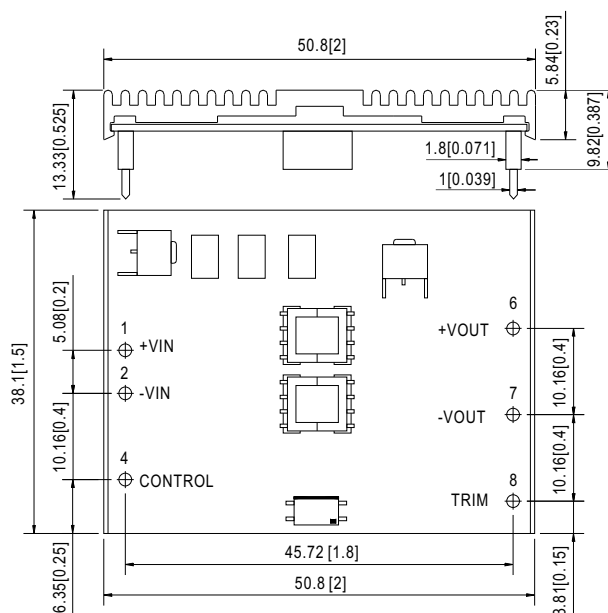
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SPECIFICATION

MODEL		NSD15-12S3	NSD15-12S5	NSD15-12S12	NSD15-12S15	NSD15-48S3	NSD15-48S5	NSD15-48S12	NSD15-48S15
OUTPUT	DC VOLTAGE	3.3V	5V	12V	15V	3.3V	5V	12V	15V
	RATED CURRENT	3.75A	3A	1.25A	1A	3.75A	3A	1.25A	1A
	CURRENT RANGE	0.18 ~ 3.75A	0.15 ~ 3A	0.06 ~ 1.25A	0.05 ~ 1A	0.18 ~ 3.75A	0.15 ~ 3A	0.06 ~ 1.25A	0.05 ~ 1A
	RATED POWER	12.37W	15W	15W	15W	12.37W	15W	15W	15W
	RIPPLE & NOISE (max.) Note.2	100mVp-p(25% ~ 100% load) for 3.3V only				75mVp-p(25% ~ 100% load)			
	VOLTAGE TOLERANCE Note.3	±2.0%							
	LINE REGULATION	±1.0% at 10% ~ 100% load							
	LOAD REGULATION	±1.0% at 10% ~ 100% load							
INPUT	RATED DC INPUT	12VDC				48VDC			
	VOLTAGE RANGE	9.4 ~ 36VDC				18 ~ 72VDC			
	EFFICIENCY (Typ.)	73%	77%	81%	81%	77%	81%	84%	85%
	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)	5.8 ~ 6.93V	5.8 ~ 7.5V	13.8 ~ 18V	17.25 ~ 22.5V	5.61 ~ 6.93V	5.5 ~ 7.5V	13.8 ~ 18V	17.25 ~ 22.5V
	SHORT CIRCUIT Note.4	Recovers automatically after fault condition is removed							
FUNCTION	ON/OFF CONTROL	Logic "1" OPEN: ON, logic "0" GND: OFF							
ENVIRONMENT	WORKING TEMP.	-25 ~ +70℃							
	WORKING HUMIDITY	0% ~ 95% RH max.							
	STORAGE TEMP., HUMIDITY	-40 ~ +85℃, 0 ~ 95% RH							
	TEMP. COEFFICIENT	±0.03%/℃ (0~50℃)							
SAFETY & EMC (Note 5)	SAFETY STANDARDS	Design refer to UL60950-1, TUV EN60950-1							
	ISOLATION VOLTAGE	I/P-O/P:1.5KVDC							
	ISOLATION RESISTANCE	I/P-O/P:100M Ohms/500VDC 25℃ 70%RH							
	EMI CONDUCTION & RADIATION	Compliance to EN55022 (CISPR22) Class B							
	EMS IMMUNITY	Compliance to EN61000-4-2,3,4,6,8; EN55024, Light industry level, criteria A							
OTHERS	MTBF	1734K hrs min. MIL-HDBK-217F (25℃)							
	DIMENSION	38.1*50.8*9.82mm (1.5"*2"*0.387") (L*W*H)							
	PACKING	0.03Kg; 180pcs/6.4Kg/0.97CUFT							
NOTE	<p>1. All parameters NOT specially mentioned are measured at 12,48VDC input, rated load and 25℃ of ambient temperature.</p> <p>2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.</p> <p>3. Tolerance : includes set up tolerance, line regulation and load regulation.</p> <p>4. Short circuit not more than 60 second.</p> <p>5. The power supply is considered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets EMC directives.</p> <p>6. EMC filter suggestion:</p> 								

Mechanical Specification

Unit:mm[inch]

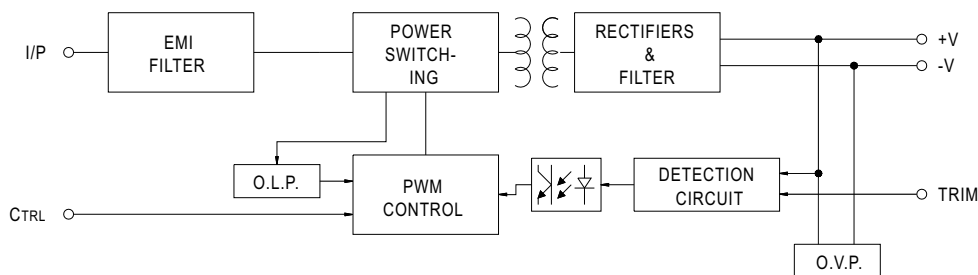


Pin No. Assignment

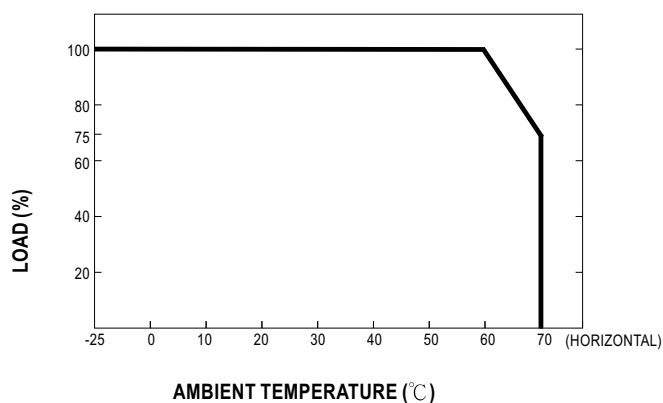
Pin No.	Assignment	Pin No.	Assignment
1	+VIN	6	+VOUT
2	-VIN	7	-VOUT
3,5	No Pin	8	TRIM
4	CONTROL		

Block Diagram

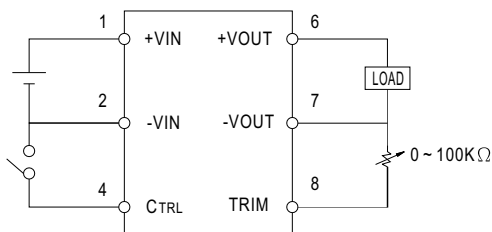
fosc : 400KHz



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