



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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■ Features :

- Wide 4:1 DC input range
- Protections: Short circuit / Overload / Over voltage
- 1000VDC I/O isolation
- Built-in EMI filter
- Cooling by free air convection
- Built-in remote ON-OFF control
- 100% full load burn-in test
- Lost cost
- High reliability
- 2 years warranty

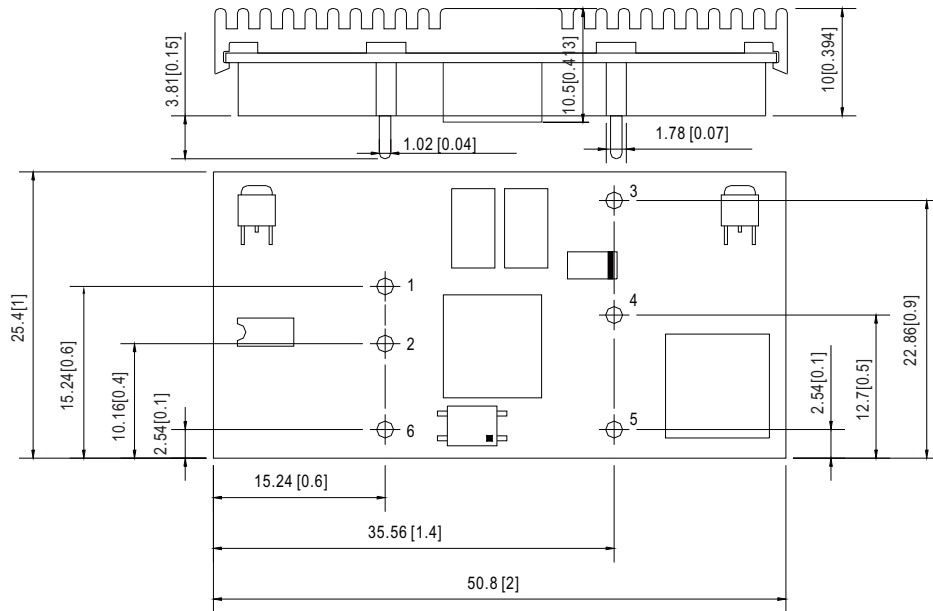


SPECIFICATION

MODEL		NSD10-12D5		NSD10-12D12		NSD10-12D15		NSD10-48D5		NSD10-48D12		NSD10-48D15	
OUTPUT	DC VOLTAGE	5V	-5V	12V	-12V	15V	-15V	5V	-5V	12V	-12V	15V	-15V
	RATED CURRENT	1A	1A	0.42A	0.42A	0.33A	0.33A	1A	1A	0.42A	0.42A	0.33A	0.33A
	CURRENT RANGE	0.05 ~ 1A	0.05 ~ 1A	0.02 ~ 0.42A	0.02 ~ 0.42A	0.016 ~ 0.33A	0.016 ~ 0.33A	0.05 ~ 1A	0.05 ~ 1A	0.02 ~ 0.42A	0.02 ~ 0.42A	0.016 ~ 0.33A	0.016 ~ 0.33A
	RATED POWER	10W		10.08W		9.9W		10W		10.08W		9.9W	
	CAPACITIVE LOAD (max.)	± 1000uF											
	RIPPLE & NOISE (max.) Note.2	75mVp-p(10% ~ 100% load)											
	VOLTAGE TOLERANCE Note.3	± 4.0%		± 2.5%		± 2.5%		± 3.0%		± 2.5%		± 2.5%	
	LINE REGULATION	± 1.0%											
	LOAD REGULATION	± 3.0%		± 2.0%		± 1.0%		± 2.0%		± 2.0%		± 1.0%	
SETUP TIME	100ms/RATED DC INPUT at full Load												
INPUT	RATED DC INPUT	12VDC						48VDC					
	VOLTAGE RANGE	9.8 ~ 36VDC						22 ~ 72VDC					
	EFFICIENCY (Typ.)	76%		77%		77%		78%		77%		77%	
	DC CURRENT	1.4A/12VDC						0.4A/48VDC					
	SHUTDOWN IDLE CURRENT	20mA/12VDC											
PROTECTION	OVERLOAD	Above 105% rated output power Protection type : Over power limiting, recovers automatically after fault condition is removed											
	OVER VOLTAGE(CLAMP)	5.75 ~ 7.5V	-5.75 ~ -7.5V	13.8 ~ 18V	-13.8 ~ -18V	17.3 ~ 22.5V	-17.3 ~ -22.5V	5.75 ~ 7.5V	-5.75 ~ -7.5V	13.8 ~ 18V	-13.8 ~ -18V	17.3 ~ 22.5V	-17.3 ~ -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°C											
	WORKING HUMIDITY	0% ~ 95% RH max.											
	STORAGE TEMP., HUMIDITY	-40 ~ +85°C, 0 ~ 95% RH											
	TEMP. COEFFICIENT	± 0.03%/°C (0~60°C)											
SAFETY & EMC (Note 5)	SAFETY STANDARDS	UL60950-1, EAC TP TC 004 approved, Design refer to TUV EN60950-1											
	ISOLATION VOLTAGE	I/P-O/P:1KVDC											
	ISOLATION RESISTANCE	I/P-O/P:100M Ohms / 500VDC / 25°C/ 70% RH											
	EMC EMISSION	Compliance to EN55032 (CISPR32) Class B, EAC TP TC 020											
	EMC IMMUNITY	Compliance to EN61000-4-2,3,4,6,8; EN55024, light industry level, criteria A, EAC TP TC 020											
OTHERS	MTBF	1878.5K hrs min. MIL-HDBK-217F (25°C)											
	DIMENSION	50.8*25.4*10mm (2**1**0.394") (L*W*H)											
	PACKING	0.02Kg; 300pcs/7Kg/0.97CUFT											
NOTE	<p>1. All parameters NOT specially mentioned are measured at 12, 48VDC input, rated load and 25°C of ambient temperature.</p> <p>2. Ripple &amp; noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf &amp; 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 seconds.</p> <p>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 <a href="http://www.meanwell.com">http://www.meanwell.com</a>)</p> <p>6. To insure proper operation, a 220uF/100V electrolytic capacitor with ESR &lt;1Ω must be added to the input line.</p> <p>7. EMC filter suggestion:</p> <p>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).</p>												

### Mechanical Specification

Unit:mm[inch]

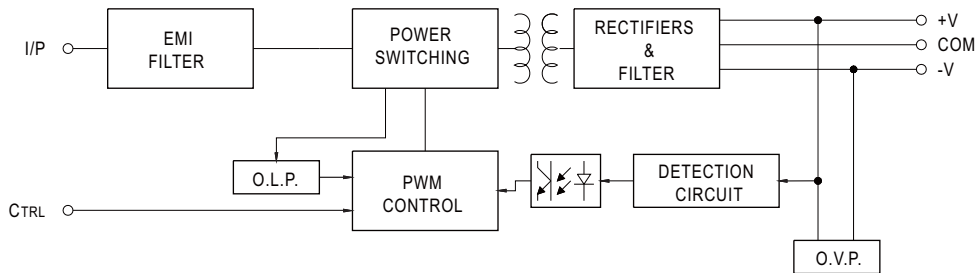


Pin. No Assignment

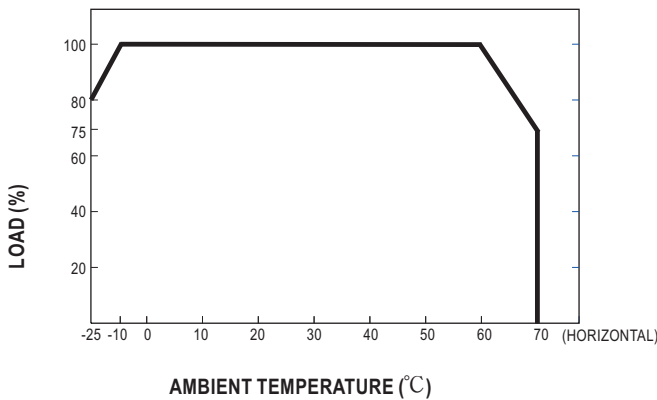
Pin No.	Assignment	Pin No.	Assignment
1	+INPUT	4	COMMON
2	-INPUT(GND)	5	-OUT
3	+OUT	6	CONTROL

### Block Diagram

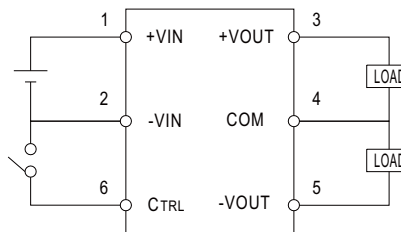
fosc : 350KHz



### Derating Curve



### ON/OFF Control



- CONTROL INPUT.....PIN6
- 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