



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
- Low cost
- High reliability
- 2 years warranty

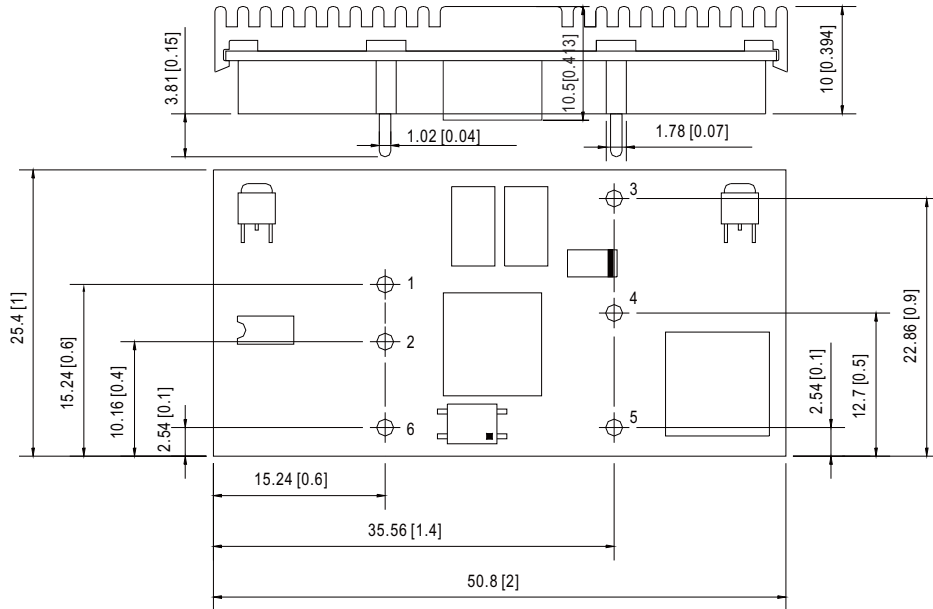


SPECIFICATION

MODEL		NSD10-12S3	NSD10-12S5	NSD10-12S9	NSD10-12S12	NSD10-12S15	NSD10-48S3	NSD10-48S5	NSD10-48S9	NSD10-48S12	NSD10-48S15	
OUTPUT	DC VOLTAGE	3.3V	5V	9V	12V	15V	3.3V	5V	9V	12V	15V	
	RATED CURRENT	2.5A	2A	1.1A	0.83A	0.67A	2.5A	2A	1.1A	0.83A	0.67A	
	CURRENT RANGE	0.12 ~ 2.5A	0.1 ~ 2A	0.05 ~ 1.1A	0.04 ~ 0.83A	0.03 ~ 0.67A	0.12 ~ 2.5A	0.1 ~ 2A	0.05 ~ 1.1A	0.04 ~ 0.83A	0.03 ~ 0.67A	
	RATED POWER	8.25W	10W	9.9W	9.96W	10.05W	8.25W	10W	9.9W	9.96W	10.05W	
	CAPACITIVE LOAD (max.)	3300uF										
	RIPPLE & NOISE (max.) Note.2	75mVp-p										
	VOLTAGE TOLERANCE Note.3	±2.0% max.										
	LINE REGULATION	±1.0%										
LOAD REGULATION	±2.0%	±1.0%	±1.0%	±1.0%	±1.0%	±2.0%	±1.0%	±1.0%	±1.0%	±1.0%	±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.)	72%	75%	78%	79%	80%	74%	77%	78%	79%	80%	
	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)	3.8 ~ 4.95V	5.75 ~ 7.5V	10.4 ~ 13.5V	13.8 ~ 18V	17.3 ~ 22.5V	3.8 ~ 4.95V	5.75 ~ 7.5V	10.4 ~ 13.5V	13.8 ~ 18V	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	2138.2K 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 & 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 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 http://www.meanwell.com)</p> <p>6. To insure proper operation, a 220uF/100V electrolytic capacitor with Esr <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]

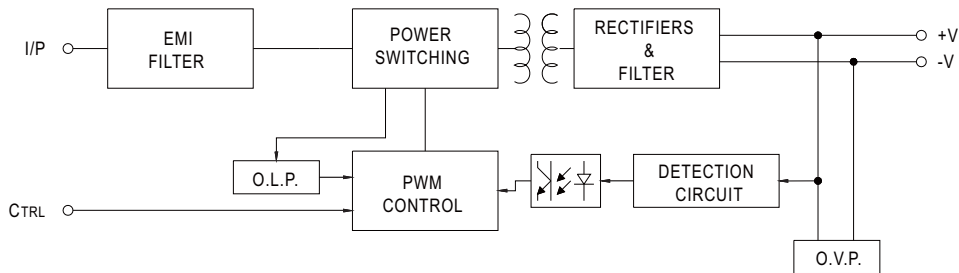


Pin. No Assignment

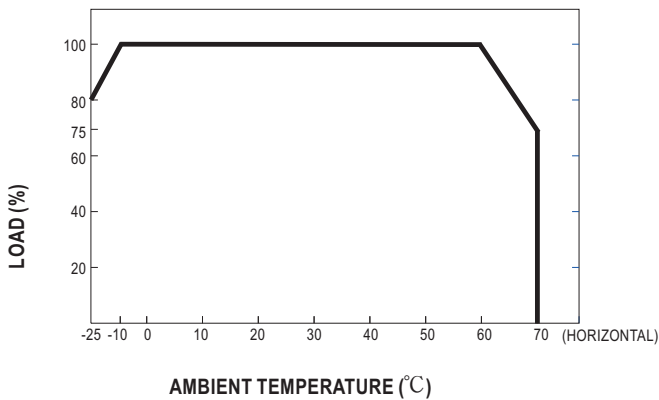
Pin No.	Assignment	Pin No.	Assignment
1	+INPUT	4	N/C
2	-INPUT(GND)	5	-OUT
3	+OUT	6	CONTROL

Block Diagram

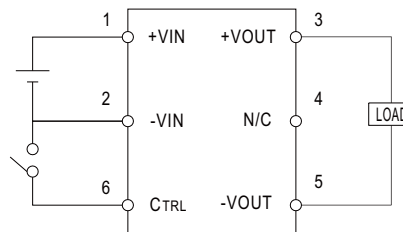
fosc : 350KHz



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