



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
- Cooling by free air convection
- Built-in remote ON-OFF control
- 100% full load burn-in test
- Low cost
- High reliability
- 2 years warranty

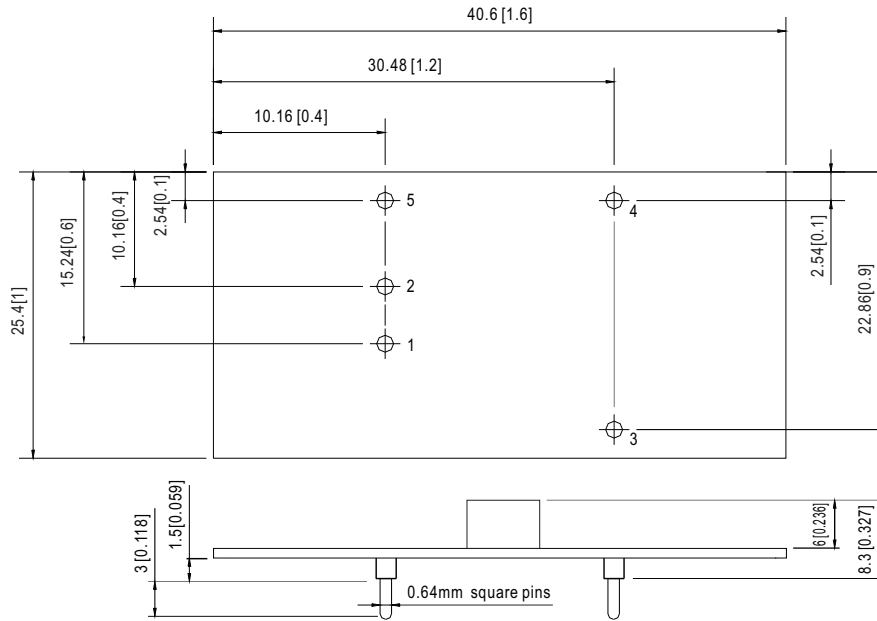


SPECIFICATION

MODEL		NSD05-12S3	NSD05-12S5	NSD05-12S12	NSD05-12S15	NSD05-48S3	NSD05-48S5	NSD05-48S12	NSD05-48S15	
OUTPUT	DC VOLTAGE	3.3V	5V	12V	15V	3.3V	5V	12V	15V	
	RATED CURRENT	1.2A	1A	0.42A	0.33A	1.2A	1A	0.42A	0.33A	
	CURRENT RANGE	0 ~ 1.2A	0 ~ 1A	0 ~ 0.42A	0 ~ 0.33A	0 ~ 1.2A	0 ~ 1A	0 ~ 0.42A	0 ~ 0.33A	
	RATED POWER	3.96W	5W	5.04W	4.95W	3.96W	5W	5.04W	4.95W	
	CAPACITIVE LOAD (max.)	1000uF	1000uF	120uF	120uF	1000uF	1000uF	120uF	120uF	
	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%	±2.0%	±1.0%	±1.0%	±1.0%	
SETUP TIME	80ms/RATED DC INPUT at full Load									
INPUT	RATED DC INPUT	12VDC				48VDC				
	VOLTAGE RANGE	9.2 ~ 36VDC				18 ~ 72VDC				
	EFFICIENCY (Typ.)	72%	76%	82%	83%	75%	78%	83%	85%	
	DC CURRENT	0.7A/12VDC				0.2A/48VDC				
	SHUTDOWN IDLE CURRENT	5mA/12VDC				5mA/48VDC				
PROTECTION	OVERLOAD	Above 105% rated output power Protection type : Over power limiting, recovers automatically after fault condition is removed								
	OVER VOLTAGE(CLAMP)	3.8 ~ 4.6V	5.6 ~ 6.8V	13.5 ~ 16.5V	16.2 ~ 19.8V	3.8 ~ 4.6V	5.6 ~ 6.8V	13.5 ~ 16.5V	16.2 ~ 19.8V	
	SHORT CIRCUIT	Recovers 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.								
	STORAGE TEMP., HUMIDITY	-40 ~ +85°C, 0 ~ 95% RH								
	TEMP. COEFFICIENT	±0.03%/°C (0~60°C)								
SAFETY & EMC (Note 4)	SAFETY STANDARDS	IEC60950-1 CB approved by TUV, EAC TP TC 004 approved								
	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								
OTHERS	EMC IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8; EN55024, light industry level, criteria A, EAC TP TC 020								
	MTBF	914.4K hrs min.		MIL-HDBK-217F (25°C)						
	DIMENSION	40.6*25.4*8.3mm (1.6**1**0.327") (L*W*H)								
NOTE	PACKING	0.007Kg; 700pcs/5.9Kg/0.97CUFT								
	<p>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. 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) 5. To insure proper operation, a 47uF/100V electrolytic capacitor with Esr <1Ω must be added to the input line. 6. EMC filter suggestion(TBD):</p> <p>7. 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]

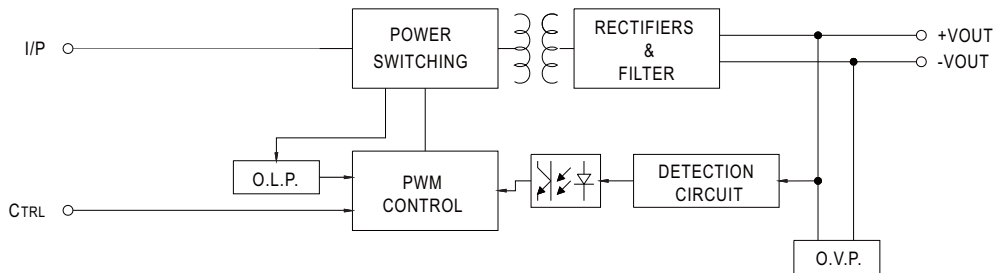


Pin No. Assignment

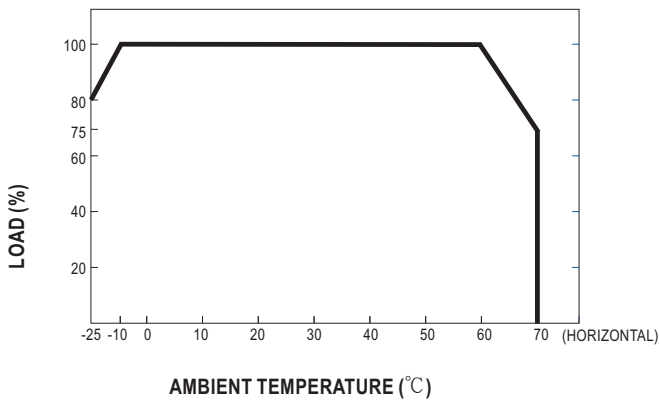
Pin No.	Assignment	Pin No.	Assignment
1	+INPUT	4	-VOUT
2	-INPUT(GND)	5	CONTROL
3	+VOUT		

Block Diagram

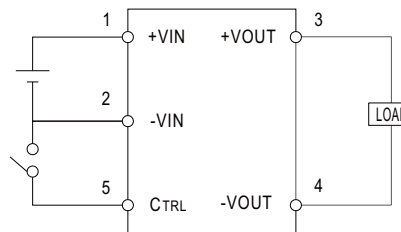
fosc : 350KHz



Derating Curve



ON/OFF Control



CONTROL INPUT.....PIN5
 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