

### Features:

- Wide 4:1 DC input range
- Protections: Short circuit / Overload / Over voltage
- 1500VDC I/O isolation
- Cooling by free air convection
- Built-in remote ON-OFF control
- 100% full load burn-in test
- Lost cost
- High reliability
- 2 years warranty



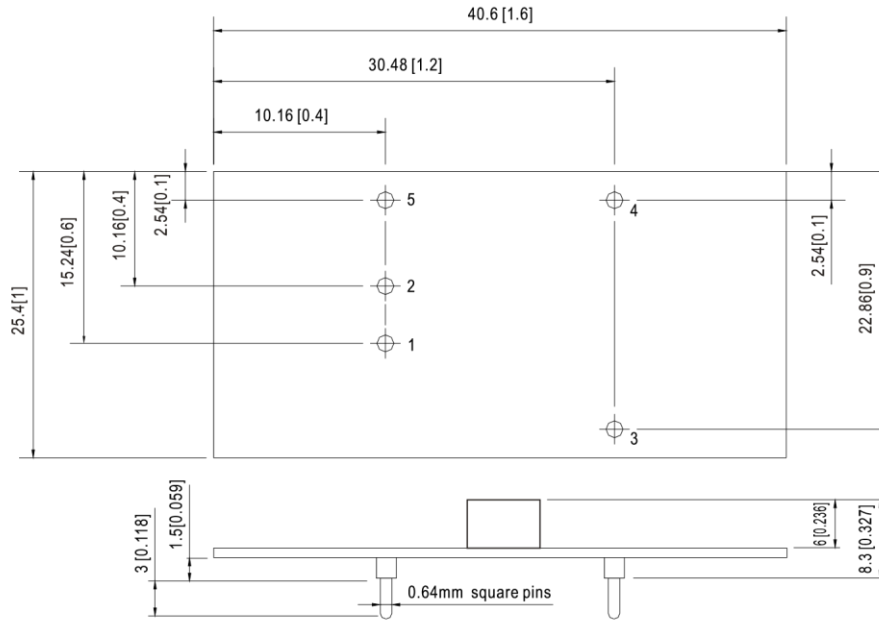
CB  
CE

### 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%		
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								
	ISOLATION VOLTAGE	I/P-O/P:1KVDC								
	ISOLATION RESISTANCE	I/P-O/P:100M Ohms / 500VDC / 25 °C / 70% RH								
	EMI CONDUCTION & RADIATION	Compliance to EN55022 (CISPR22) Class B								
OTHERS	EMS IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8; EN55024, light industry level, criteria A								
	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								
	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. The final equipment must be re-confirmed that it still meets EMC directives. 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):									

### Mechanical Specification

Unit:mm[inch]

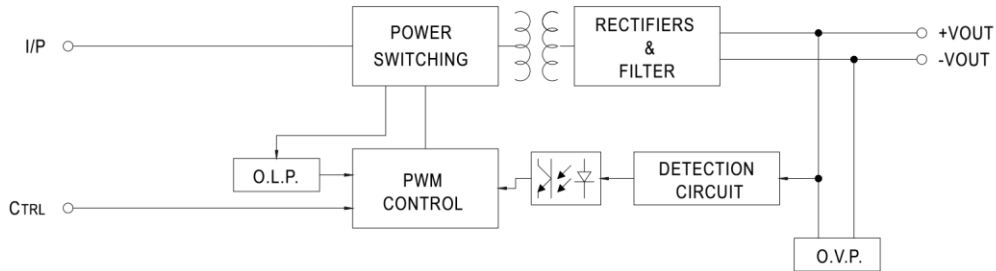


#### Pin No. Assignment

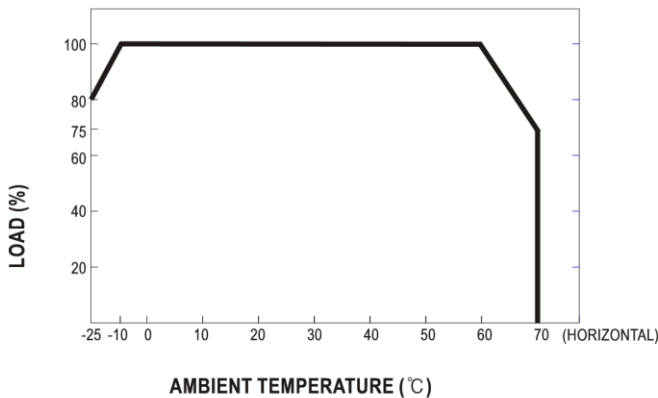
Pin No.	Assignment	Pin No.	Assignment
1	+INPUT	4	-VOUT
2	-INPUT(GND)	5	CONTROL
3	+VOUT		

### Block Diagram

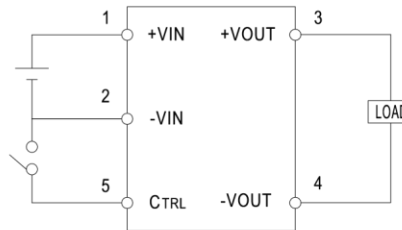
fosc : 350KHz



### 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