

12.5~30W DC-DC Non-isolated Single Output Converter

NID30 series



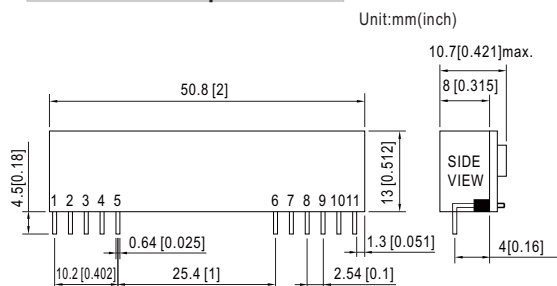
■ Features :

- Economical open frame design
- Wide input range
- High efficiency up to 96%
- Built-in remote ON / OFF control
- Compact size 2.0"x0.512"x 0.421" (SIP package)
- Cooling by free air convection
- Protections: Short circuit / Overload / Over voltage
- 100% burn-in test
- Low cost / High reliability
- 2 years warranty

SPECIFICATION

ORDER NO.		NID30S24-05	NID30S24-12	NID30S24-15	NID30S48-24
OUTPUT	DC VOLTAGE	5V	12V	15V	24V
	CURRENT RANGE	0 ~ 2.5A	0 ~ 2.5A	0 ~ 2A	0 ~ 1.25A
	RATED POWER	12.5W	30W	30W	30W
	RIPPLE & NOISE (max.) Note.2	100mVp-p	120mVp-p	150mVp-p	200mVp-p
	LINE REGULATION Note.3	±0.5%			
	LOAD REGULATION Note.4	±0.5%			
	VOLTAGE ACCURACY	±2.0%			
	SWITCHING FREQUENCY (Typ.)	250KHz			
INPUT	EXTERNAL CAPACITANCE LOAD (max.)	100uF / 25V low ESR	68uF/16V low ESR	47uF/50V low ESR	
	VOLTAGE RANGE	20 ~ 53VDC	20 ~ 53VDC	20 ~ 53VDC	30 ~ 53VDC
	NORMAL VOLTAGE	24VDC (or 48VDC)	24VDC (or 48VDC)	24VDC (or 48VDC)	48VDC
	EFFICIENCY (Typ.)	91%	95%	96%	93%
	DC CURRENT	Full load No load	590mA 20mA	1310mA 30mA	1320mA 30mA
PROTECTION		Fuse recommended (3A)			
PROTECTION	OVERLOAD (Typ.)	120 ~ 300% rated output power Protection type : Hiccup mode, recovers automatically after fault condition is removed			
	SHORT CIRCUIT	All output equipped with short circuit Protection type : Hiccup mode, recovers automatically after fault condition is removed			
	OVER VOLTAGE	Protection type : Shut off o/p voltage, clamp by TVS diode			
ENVIRONMENT	WORKING TEMP.	-25 ~ +65°C (Refer to "Derating Curve")			
	WORKING HUMIDITY	20% ~ 85% RH non-condensing			
	STORAGE TEMP., HUMIDITY	-25 ~ +105°C, 10 ~ 85% RH			
	TEMP. COEFFICIENT	±0.03% / °C (0 ~ 50°C)			
OTHERS	VIBRATION	10 ~ 500Hz, 2G 10min./1 cycle, period for 60min. each along X, Y, Z axes			
	REMOTE CONTROL	Power on : 3.3VDC < R.C ~ com < 12VDC or open circuit ; power off : R.C ~ com < 0.4VDC or short circuit (PIN5,6 & PIN11)			
	DIMENSION	50.8*13*10.7mm or 2.0**0.512**0.421" inch (L*W*H)			
	WEIGHT	8g			

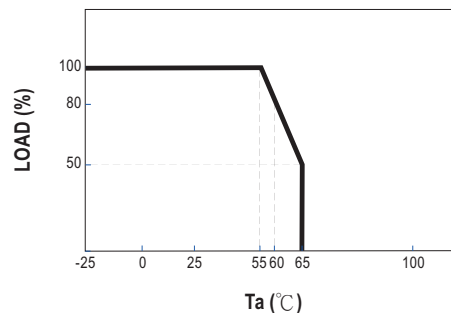
■ Mechanical Specification



■ Pin Configuration

Pin No.	Output
1, 2, 3, 4	+Vout
5, 6	Com
7, 8	+Vin
9, 10	N.C.
11	R.C.

■ Derating Curve



NOTE

1. All parameters are specified at normal input, rated load, 25°C 70% RH Ambient.
2. Ripple & noise are measured at 20MHz by using a 12" twisted pair terminated with a 0.1uF & 47uF capacitor.
3. Line regulation is measured from low line to high line at rated load.
4. Load regulation is measured from 10% to 100% rated load.