

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

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		3 ±0.5%			
	LOAD REGULATION Note.4		4 ±0.5%			
	VOLTAGE ACCURACY		±2.0%			
	SWITCHING FREQUENCY (Typ.)) 250KHz			
	EXTERNAL CAPACITANCE LOAD (max.)		100uF / 25V low ESR 68uf/16V low ESR 47uf/50V low ESR			
INPUT	VOLTAGE RANGE		20 ~ 53VDC	20 ~ 53VDC	20 ~ 53VDC	
	NORMAL VOLTAGE		24VDC (or 48VDC)	24VDC (or 48VDC)	24VDC (or 48VDC)	48VDC
	EFFICIENCY (Typ.)		91%	95%	96%	93%
	DC CURRENT	Full load	590mA	1310mA	1320mA	700mA
		No load	20mA	30mA	30mA	50mA
	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 output load 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)			
	VIBRATION		10 ~ 500Hz, 2G 10min./1 cycle, period for 60min. each along X, Y, Z axes			
OTHERS	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			
■ Me	chanical Speci	ification	Unit:mm(inch)	Pin Configuration	Derating	l Curve
			10.7[0.421]max.			
			8 [0.315]	Pin No. Output 1,2,3,4 +Vout		
~ · · · ·	50.8 [2]			5,6 Com	100	
3.6 +1/-0[0.142]				7,8 +Vin	(% 80	
1/-0[9,10 N.C.	(%) 80 - (%) CVAD (%) -	
+ 9 123	4 5	678910		11 R.C.	10 50	
	0.64 [0.025]				-25 0 25	5560 65 100
						Ta (°C)
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. 					

SPECIFICATION