

### ■ Features :

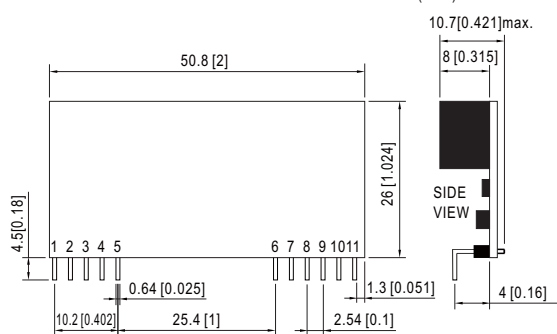
- Economical open frame design
- Wide input range
- High efficiency up to 96%
- Built-in remote ON / OFF control
- Compact size 2.0"x1.024"x 0.421"(SIP package)
- Cooling by free air convection
- Protections: Short circuit / Overload / Over voltage
- 100% burn-in test
- Low cost / High reliability
- 2 years warranty

### SPECIFICATION

| ORDER NO.   |                                  | NID60S24-05                                                                                                                      | NID60S24-12      | NID60S24-15      | NID60S48-24 |
|-------------|----------------------------------|----------------------------------------------------------------------------------------------------------------------------------|------------------|------------------|-------------|
| OUTPUT      | DC VOLTAGE                       | 5V                                                                                                                               | 12V              | 15V              | 24V         |
|             | CURRENT RANGE                    | 0 ~ 4A                                                                                                                           | 0 ~ 4A           | 0 ~ 4A           | 0 ~ 2.5A    |
|             | RATED POWER                      | 20W                                                                                                                              | 48W              | 60W              | 60W         |
|             | 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.)                | 90%                                                                                                                              | 95%              | 96%              | 95%         |
|             | DC CURRENT                       | Full load                                                                                                                        | 940mA            | 2120mA           | 1320mA      |
|             |                                  | No load                                                                                                                          | 20mA             | 30mA             | 50mA        |
| PROTECTION  | PROTECTION                       | Fuse recommended (5A)                                                                                                            |                  |                  |             |
|             | OVERLOAD (Typ.)                  | 120 ~ 300% rated output power<br>Protection type : Hiccup mode, recovers automatically after fault condition is removed          |                  |                  |             |
|             | SHORT CIRCUIT                    | All output equipped with short circuit<br>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℃ (Refer to "Derating Curve")                                                                                           |                  |                  |             |
|             | WORKING HUMIDITY                 | 20% ~ 85% RH non-condensing                                                                                                      |                  |                  |             |
|             | STORAGE TEMP., HUMIDITY          | -25 ~ +105℃, 10 ~ 85% RH                                                                                                         |                  |                  |             |
|             | TEMP. COEFFICIENT                | ±0.03% / °C (0 ~ 50℃)                                                                                                            |                  |                  |             |
|             | 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*26*10.7mm or 2.0**1.024**0.421" inch (L*W*H)                                                                                |                  |                  |             |
|             | WEIGHT                           | 15g                                                                                                                              |                  |                  |             |

### ■ Mechanical Specification

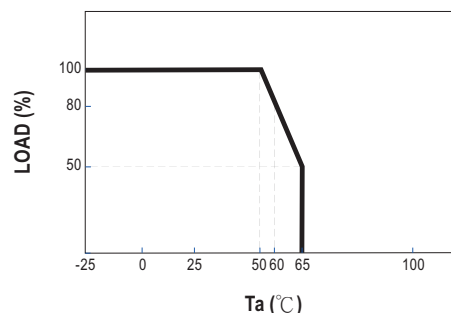
Unit:mm(inch)



### ■ 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℃ 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.