

5 瓦功率输出 (5 Watts of Output Power)  
 宽电压输入 (2:1 Wide Input )  
 输入输出隔离 (Isolated Output)  
 长期短路保护, 自恢复 (Short Circuit Protection, Automatic Recovery)  
 小型化封装 (Mini Package)

### 产品命名方式

YND 5 - 48 S 05

- 输出电压 (Output Voltage): 5V、12V、15V、24V
- 输出模式 (Output Mode): S: 单路 (Single)、D: 双路 (Dual)
- 输入电压 (Input Voltage): 6V、12V、24V、48V
- 输出功率 (Output Power): 5W
- 系列号 (Series): YND

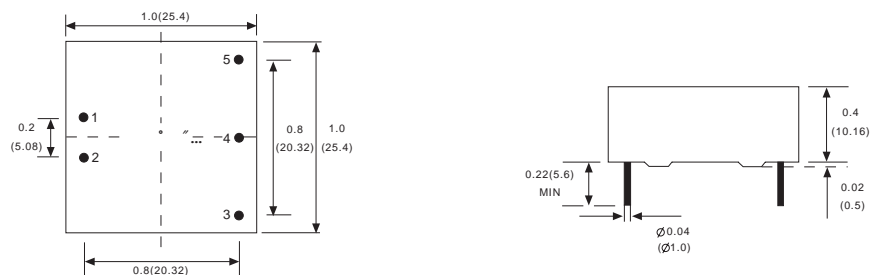
| 输入特性 Input    | Min | Nom | Max | Notes |
|---------------|-----|-----|-----|-------|
| 输入电压 Vdc      | 4.5 | 6   | 9   |       |
| Input Voltage | 9   | 12  | 18  |       |
|               | 18  | 24  | 36  |       |
|               | 36  | 48  | 72  |       |

| 输出特性 Output             |  |                      |                         |
|-------------------------|--|----------------------|-------------------------|
| 输出电压精度                  |  | ± 1%                 | Vo1                     |
| Setpoint Accuracy       |  | ± 3%                 | Vo2                     |
| 源效应                     |  |                      |                         |
| Line Regulation         |  | ± 0.2 %              |                         |
| 负载效应                    |  |                      |                         |
| Load Regulation         |  | ± 0.5 %              |                         |
| 动态响应                    |  | 3% Vo Pk deviation   | 50~75% load 50~25% load |
| Dynamic Response        |  | 200 μS settling time |                         |
| 纹波与噪声                   |  | 50mVp-p              | Vo ≤ 5Vdc               |
| Ripple and Noise        |  | 100mVp-p             | Other                   |
| 温度系数                    |  |                      |                         |
| Temperature coefficient |  | ± 0.02%/°C           |                         |

| 综合特性 General        |          |                        |   |
|---------------------|----------|------------------------|---|
| 隔离电压                | ≥ 500Vdc |                        | Input-Output<br>Input-Case<br>Output-Case |
| Isolation Voltage   |          |                        |   |
| 开关频率                |          | 300KHZ                 |   |
| Switching Frequency |          |                        |   |
| 效率                  |          | 82%                    | typ                                       |
| Efficiency          |          |                        |   |
| MTBF                |          | 10 × 10 <sup>5</sup> h | Bellcore TR332, 25°C                      |
| 工作壳温                | -25°C    |                        | +85°C                                     |
| Case Temperature    | -43°C    |                        | +105°C                                    |
|                     |          |                        | Military 军品级                              |
| 储存温度                |          |                        |   |
| Storage Temperature | -40°C    |                        | +125°C                                    |
| 相对湿度                |          |                        |   |
| Relative Humidity   | 10%      |                        | 90%                                       |

# YND 5 Series DC-DC CONVERTER

| 型号<br>Model | 输入电压 (Vdc)<br>Input Voltage | 输出电压 (Vdc)<br>Output Voltage | 输出电流 (A)<br>Output Current |
|-------------|-----------------------------|------------------------------|----------------------------|
| YND5-6S03   | 4.5 ~ 9                     | 3.3                          | 1.2                        |
| YND5-6S05   | 4.5 ~ 9                     | 5.05                         | 1                          |
| YND5-6S12   | 4.5 ~ 9                     | 12                           | 0.42                       |
| YND5-6S15   | 4.5 ~ 9                     | 15                           | 0.33                       |
| YND5-6S24   | 4.5 ~ 9                     | 24                           | 0.21                       |
| YND5-12S03  | 9 ~ 18                      | 3.3                          | 1.2                        |
| YND5-12S05  | 9 ~ 18                      | 5.05                         | 1                          |
| YND5-12S12  | 9 ~ 18                      | 12                           | 0.42                       |
| YND5-12S15  | 9 ~ 18                      | 15                           | 0.33                       |
| YND5-12S24  | 9 ~ 18                      | 24                           | 0.21                       |
| YND5-24S03  | 18 ~ 36                     | 3.3                          | 1.2                        |
| YND5-24S05  | 18 ~ 36                     | 5.05                         | 1                          |
| YND5-24S12  | 18 ~ 36                     | 12                           | 0.42                       |
| YND5-24S15  | 18 ~ 36                     | 15                           | 0.33                       |
| YND5-24S24  | 18 ~ 36                     | 24                           | 0.21                       |
| YND5-48S03  | 36 ~ 72                     | 3.3                          | 1.2                        |
| YND5-48S05  | 36 ~ 72                     | 5.05                         | 1                          |
| YND5-48S12  | 36 ~ 72                     | 12                           | 0.42                       |
| YND5-48S15  | 36 ~ 72                     | 15                           | 0.33                       |
| YND5-48S24  | 36 ~ 72                     | 24                           | 0.21                       |
| YND5-6D05   | 4.5 ~ 9                     | +5.05/-5.05                  | +0.5/-0.5                  |
| YND5-6D12   | 4.5 ~ 9                     | +12/-12                      | +0.2/-0.2                  |
| YND5-6D15   | 4.5 ~ 9                     | +15/-15                      | +0.16/-0.16                |
| YND5-12D05  | 9 ~ 18                      | +5.05/-5.05                  | +0.5/-0.5                  |
| YND5-12D12  | 9 ~ 18                      | +12/-12                      | +0.2/-0.2                  |
| YND5-12D15  | 9 ~ 18                      | +15/-15                      | +0.16/-0.16                |
| YND5-24D05  | 18 ~ 36                     | +5.05/-5.05                  | +0.5/-0.5                  |
| YND5-24D12  | 18 ~ 36                     | +12/-12                      | +0.2/-0.2                  |
| YND5-24D15  | 18 ~ 36                     | +15/-15                      | +0.16/-0.16                |
| YND5-48D05  | 36 ~ 72                     | +5.05/-5.05                  | +0.5/-0.5                  |
| YND5-48D12  | 36 ~ 72                     | +12/-12                      | +0.2/-0.2                  |
| YND5-48D15  | 36 ~ 72                     | +15/-15                      | +0.16/-0.16                |



| 管脚定义 | 1    | 2    | 3   | 4   | 5   |
|------|------|------|-----|-----|-----|
| 单路   | +Vin | -Vin | -Vo | NP  | +Vo |
| 双路   | +Vin | -Vin | Vo2 | COM | Vo1 |

注：NP 代表无管脚