

**DNV-5W SERIES, 5WATT, 4:1 INPUT RANGE**
**FEATURES:**

- ✓ 1500Vdc isolation voltage
- ✓ Metal/Plastic case with low ripple and noise
- ✓ Short circuit and input under voltage protection
- ✓ Operating temperature range -40°C to +85°C
- ✓ 3 year warranty



| Model      | Input voltage (Vdc) | Output voltage (Vdc) | Output current (mA) | Efficiency Typ. |
|------------|---------------------|----------------------|---------------------|-----------------|
| DNV5W-2411 | 24(9~36)            | 5                    | 1000                | 81%             |
| DNV5W-2415 |                     | 9                    | 555                 | 80%             |
| DNV5W-2412 |                     | 12                   | 410                 | 81%             |
| DNV5W-2413 |                     | 15                   | 330                 | 81%             |
| DNV5W-2414 |                     | 24                   | 210                 | 82%             |
| DNV5W-2421 |                     | ±5                   | 500                 | 79%             |
| DNV5W-2425 |                     | ±9                   | 278                 | 80%             |
| DNV5W-2422 |                     | ±12                  | 205                 | 81%             |
| DNV5W-2423 |                     | ±15                  | 165                 | 82%             |
| DNV5W-2424 |                     | ±24                  | 100                 | 83%             |
| DNV5W-4811 | 48(18~72)           | 5                    | 1000                | 81%             |
| DNV5W-4815 |                     | 9                    | 555                 | 81%             |
| DNV5W-4812 |                     | 12                   | 410                 | 81%             |
| DNV5W-4813 |                     | 15                   | 330                 | 83%             |
| DNV5W-4814 |                     | 24                   | 210                 | 83%             |
| DNV5W-4821 |                     | ±5                   | 500                 | 79%             |
| DNV5W-4825 |                     | ±9                   | 278                 | 80%             |
| DNV5W-4822 |                     | ±12                  | 205                 | 81%             |
| DNV5W-4823 |                     | ±15                  | 165                 | 82%             |
| DNV5W-4824 |                     | ±24                  | 100                 | 83%             |

Notes: other input and output models may available on request.

**Above models are default to plastic case, you may request for the models with metal case, plus "M" in the suffix.**

**ELECTRICAL**

|   |                            |               |
|---|----------------------------|---------------|
| Output voltage accuracy (Full voltage, full load) | +Vo                        | ±2% max.      |
|   | -Vo                        | ±3% max.      |
| Line regulation                                   | Nominal Load, full voltage | ±0.5% max.    |
| Load regulation                                   | 20% ~ 100% full load       | ±1% max.      |
| Ripple and noise                                  | 20MHz BM, full load        | 100mVp-p max. |
| Operating frequency                               | Typical value              | 300KHz max.   |

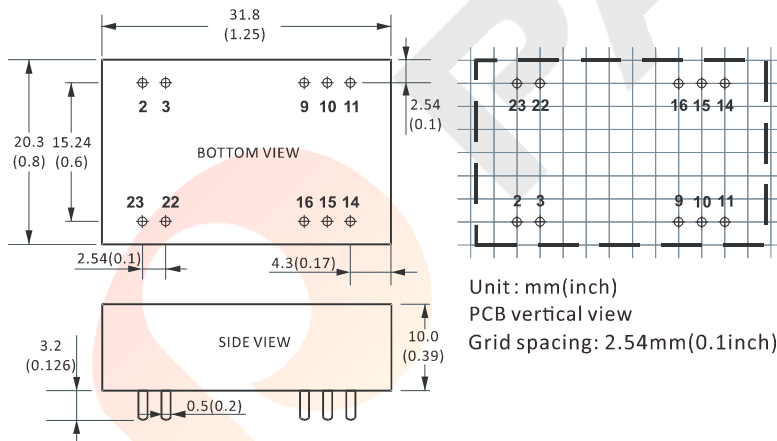
## DNV-5W SERIES, 5WATT, 4:1 INPUT RANGE

### ELECTRICAL

|  |                                       |   |
|--|---------------------------------------|---|
| Isolation voltage<br>( $<1\text{mA/min}$ ) | Input to output                       | 1500Vdc   |
| Isolation resistance                       | ---                                   | 1000m $\Omega$                                  |
| Temperature coefficient                    | ---                                   | $\pm 0.03\%/^{\circ}\text{C}$ max.              |
| Operating temperature range                | ---                                   | $-40^{\circ}\text{C}$ to $+85^{\circ}\text{C}$  |
| Storage temperature range                  | ---                                   | $-55^{\circ}\text{C}$ to $+125^{\circ}\text{C}$ |
| Short circuit protection                   | ---                                   | Continuous, auto-recovery                       |
| Relative humidity                          | ---                                   | 10%-90%   |
| MTBF                                       | Bellcore TR-332, $25^{\circ}\text{C}$ | 1000KHrs  |
| Weight                                     | ---                                   | 18g   |

**Notes:** All the parameters are measured at  $25^{\circ}\text{C}$  ambient temperature, humidity  $< 75\%$ , nominal input voltage, full load and after warm-up, unless otherwise specified.

### MECHANICAL

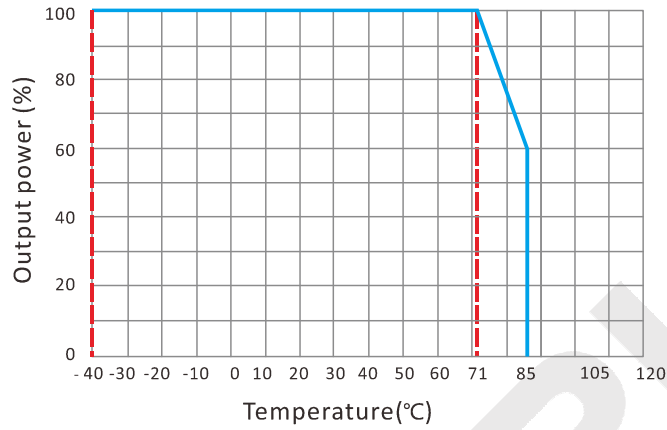
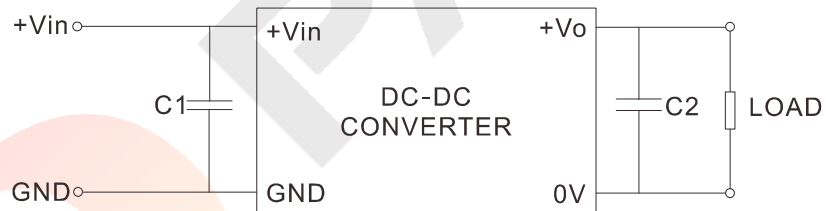
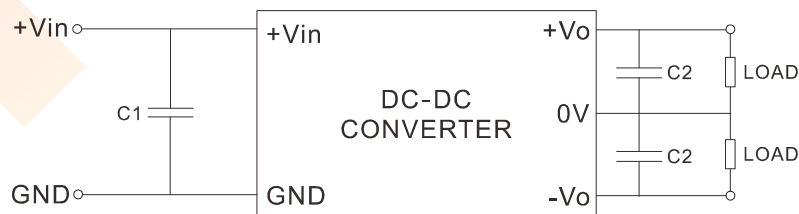


### CONNECTION

| PIN # | SINGLE | DUAL   |
|-------|--------|--------|
| 2     | GND    | GND    |
| 3     | GND    | GND    |
| 9     | NC     | 0V     |
| 10    | No Pin | No Pin |
| 11    | NC     | -Vo2   |
| 14    | +Vo    | +Vo1   |
| 15    | No Pin | No Pin |
| 16    | 0V     | 0V     |
| 22    | +Vin   | +Vin   |
| 23    | +Vin   | +Vin   |

Note:

\* Unit is mm(inch).

**DNV-5W SERIES, 5WATT, 4:1 INPUT RANGE**
**ELECTRICAL CURVE**

**NOTES**
**RECOMMENDED TEST AND APPLICATION CIRCUIT**
**SINGLE OUTPUT**

**DUAL OUTPUT**


## DNV-5W SERIES, 5WATT, 4:1 INPUT RANGE

## NOTES

## CAPACITOR SELECTION

| INPUT VOLTAGE | C1          | SINGLE OUTPUT | C2           | DUAL OUTPUT | C2          |
|---------------|-------------|---------------|--------------|-------------|-------------|
| 24VDC         | 100 $\mu$ F | 5VDC          | 1000 $\mu$ F | $\pm$ 5VDC  | 680 $\mu$ F |
| 48VDC         | 47 $\mu$ F  | 9VDC          | 470 $\mu$ F  | $\pm$ 9VDC  | 330 $\mu$ F |
| --            | --          | 12VDC         | 330 $\mu$ F  | $\pm$ 12VDC | 220 $\mu$ F |
| --            | --          | 15VDC         | 330 $\mu$ F  | $\pm$ 15VDC | 220 $\mu$ F |
| --            | --          | 24VDC         | 220 $\mu$ F  | $\pm$ 24VDC | 100 $\mu$ F |