

**DNV-5F SERIES, 5WATT, 2:1 INPUT RANGE**
**FEATURES:**

- ✓ 3000Vdc 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<br>(Vdc) | Output voltage<br>(Vdc) | Output current<br>(mA) | Efficiency<br>Typ. |
|------------|------------------------|-------------------------|------------------------|--------------------|
| DNV5-0511F | 5(4.5~9)               | 5                       | 1000                   | 74%                |
| DNV5-0515F |                        | 9                       | 555                    | 77%                |
| DNV5-0512F |                        | 12                      | 410                    | 82%                |
| DNV5-0513F |                        | 15                      | 330                    | 79%                |
| DNV5-0514F |                        | 24                      | 210                    | 79%                |
| DNV5-0521F |                        | ±5                      | 500                    | 74%                |
| DNV5-0525F |                        | ±9                      | 278                    | 78%                |
| DNV5-0522F |                        | ±12                     | 205                    | 77%                |
| DNV5-0523F |                        | ±15                     | 165                    | 81%                |
| DNV5-0524F |                        | ±24                     | 100                    | 81%                |
| DNV5-1211F |                        | 12(9~18)                | 5                      | 1000               |
| DNV5-1215F | 9                      |                         | 555                    | 80%                |
| DNV5-1212F | 12                     |                         | 410                    | 81%                |
| DNV5-1213F | 15                     |                         | 330                    | 81%                |
| DNV5-1214F | 24                     |                         | 210                    | 81%                |
| DNV5-1221F | ±5                     |                         | 500                    | 79%                |
| DNV5-1225F | ±9                     |                         | 278                    | 81%                |
| DNV5-1222F | ±12                    |                         | 205                    | 81%                |
| DNV5-1223F | ±15                    |                         | 165                    | 82%                |
| DNV5-1224F | ±24                    |                         | 100                    | 83%                |
| DNV5-2411F | 24(18~36)              |                         | 5                      | 1000               |
| DNV5-2415F |                        | 9                       | 555                    | 80%                |
| DNV5-2412F |                        | 12                      | 410                    | 81%                |
| DNV5-2413F |                        | 15                      | 330                    | 81%                |
| DNV5-2414F |                        | 24                      | 210                    | 83%                |
| DNV5-2421F |                        | ±5                      | 500                    | 79%                |
| DNV5-2425F |                        | ±9                      | 278                    | 80%                |
| DNV5-2422F |                        | ±12                     | 205                    | 81%                |

**DNV-5F SERIES, 5WATT, 2:1 INPUT RANGE**

| Model      | Input voltage (Vdc) | Output voltage (Vdc) | Output current (mA) | Efficiency Typ. |
|------------|---------------------|----------------------|---------------------|-----------------|
| DNV5-2423F | 24(18~36)           | ±15                  | 165                 | 82%             |
| DNV5-2424F |                     | ±24                  | 100                 | 83%             |
| DNV5-4811F | 48(36~72)           | 5                    | 1000                | 81%             |
| DNV5-4815F |                     | 9                    | 555                 | 81%             |
| DNV5-4812F |                     | 12                   | 410                 | 81%             |
| DNV5-4813F |                     | 15                   | 330                 | 83%             |
| DNV5-4814F |                     | 24                   | 210                 | 84%             |
| DNV5-4821F |                     | ±5                   | 500                 | 79%             |
| DNV5-4825F |                     | ±9                   | 278                 | 80%             |
| DNV5-4822F |                     | ±12                  | 205                 | 81%             |
| DNV5-4823F |                     | ±15                  | 165                 | 82%             |
| DNV5-4824F |                     | ±24                  | 100                 | 82%             |

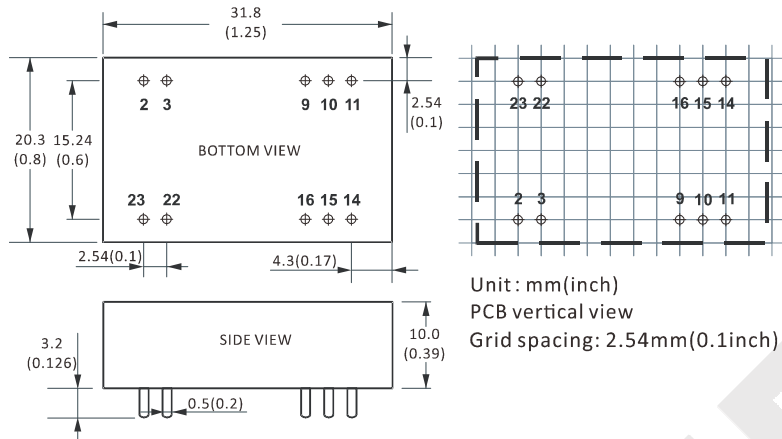
Notes: other input and output models may available on request.

Above models are default to plastic case, you may request for the models with metal case, plus "M" in the suffix, E.g. DNV5-0511MF.

**ELECTRICAL**

|   |                            |                           |
|---|----------------------------|---------------------------|
| Output voltage accuracy (Full voltage, full load) | +Vo<br>-Vo                 | ±2% max.<br>±3% max.      |
| Line regulation                                   | Nominal Load, full voltage | ±0.5% max.                |
| Load regulation                                   | 20% ~ 100% full load       | ±2% max.                  |
| Ripple and noise                                  | 20MHz BM, full load        | 100mVp-p max.             |
| Operating frequency                               | Typical value              | 300KHz typ.               |
| Isolation voltage (<1mA/min)                      | Input to output            | 3000Vdc                   |
| Isolation resistance                              | ---                        | 1000mΩ                    |
| Temperature coefficient                           | ---                        | ±0.03%/°C max.            |
| Operating temperature range                       | ---                        | -40°C to +85°C            |
| Storage temperature range                         | ---                        | -55°C to +125°C           |
| Short circuit protection                          | ---                        | Continuous, auto-recovery |
| Relative humidity                                 | ---                        | 10%-90%                   |
| MTBF  | Bellcore TR-332, 25°C      | 1000KHrs                  |
| Weight  | ---                        | 18g                       |

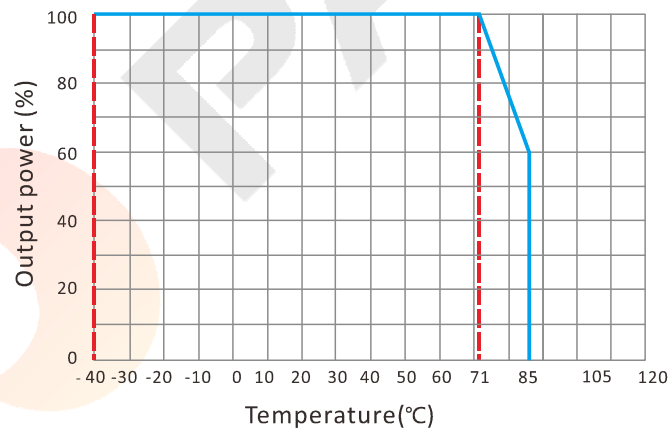
Notes: All the parameters are measured at 25°C ambient temperature, humidity < 75%, nominal input voltage, full load and after warm-up, unless otherwise specified.

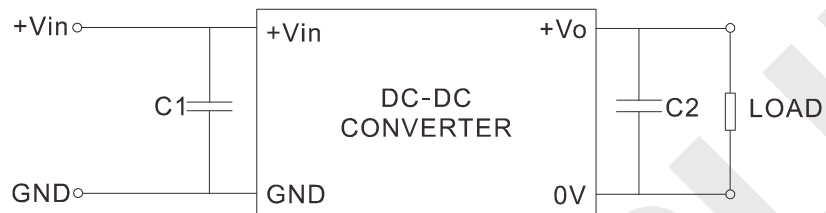
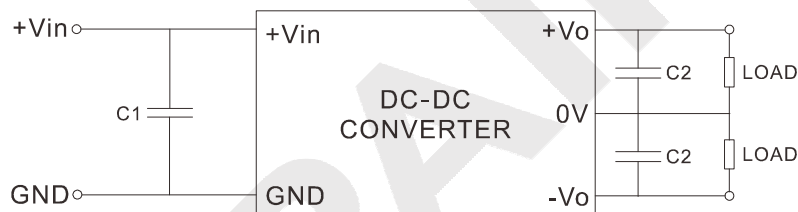
**DNV-5F SERIES, 5WATT, 2:1 INPUT RANGE**
**MECHANICAL**

**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).

**ELECTRICAL CURVE**


**DNV-5F SERIES, 5WATT, 2:1 INPUT RANGE**
**NOTES**
**RECOMMENDED TEST AND APPLICATION CIRCUIT**
**SINGLE OUTPUT**

**DUAL OUTPUT**

**CAPACITOR SELECTION**

| INPUT VOLTAGE | C1          | SINGLE OUTPUT | C2          | DUAL OUTPUT | C2          |
|---------------|-------------|---------------|-------------|-------------|-------------|
| 5VDC          | 100 $\mu$ F | 5VDC          | 470 $\mu$ F | $\pm$ 5VDC  | 220 $\mu$ F |
| 12VDC         | 47 $\mu$ F  | 9VDC          | 220 $\mu$ F | $\pm$ 9VDC  | 100 $\mu$ F |
| 24VDC         | 47 $\mu$ F  | 12VDC         | 100 $\mu$ F | $\pm$ 12VDC | 47 $\mu$ F  |
| 48VDC         | 10 $\mu$ F  | 15VDC         | 100 $\mu$ F | $\pm$ 15VDC | 47 $\mu$ F  |
| --            | --          | 24VDC         | 47 $\mu$ F  | $\pm$ 24VDC | 22 $\mu$ F  |