

**DHV-12W SERIES, 12WATT, 4:1 INPUT RANGE**

**FEATURES:**

- ✓ Wide input range(4:1)
- ✓ Six-side shielded metal case
- ✓ Low ripple and noise
- ✓ Over current and short circuit protection
- ✓ Typical efficiency up to 85%
- ✓ 3 year warranty



| Model       | Input voltage (Vdc) | Output voltage (Vdc) | Output current (mA) | Efficiency Typ. |     |
|-------------|---------------------|----------------------|---------------------|-----------------|-----|
| DHV12W-2411 | 18(9~36)            | 5                    | 2400                | 81%             |     |
| DHV12W-2415 |                     | 9                    | 1333                | 83%             |     |
| DHV12W-2412 |                     | 12                   | 1000                | 84%             |     |
| DHV12W-2413 |                     | 15                   | 800                 | 84%             |     |
| DHV12W-2414 |                     | 24                   | 500                 | 85%             |     |
| DHV12W-2421 |                     | ±5                   | ±1200               | 81%             |     |
| DHV12W-2425 |                     | ±9                   | ±667                | 82%             |     |
| DHV12W-2422 |                     | ±12                  | ±500                | 84%             |     |
| DHV12W-2423 |                     | ±15                  | ±400                | 84%             |     |
| DHV12W-2424 |                     | ±24                  | ±250                | 85%             |     |
| DHV12W-4811 |                     | 36(18~72)            | 5                   | 2400            | 81% |
| DHV12W-4815 |                     |                      | 9                   | 1333            | 83% |
| DHV12W-4812 |                     |                      | 12                  | 1000            | 84% |
| DHV12W-4813 |                     |                      | 15                  | 800             | 84% |
| DHV12W-4814 | 24                  |                      | 500                 | 84%             |     |
| DHV12W-4821 | ±5                  |                      | ±1200               | 81%             |     |
| DHV12W-4825 | ±9                  |                      | ±667                | 83%             |     |
| DHV12W-4822 | ±12                 |                      | ±500                | 84%             |     |
| DHV12W-4823 | ±15                 |                      | ±400                | 84%             |     |
| DHV12W-4824 | ±24                 |                      | ±250                | 85%             |     |

**Notes:**

1. Other input and output models may available on request;
2. Above models are default to metal case.

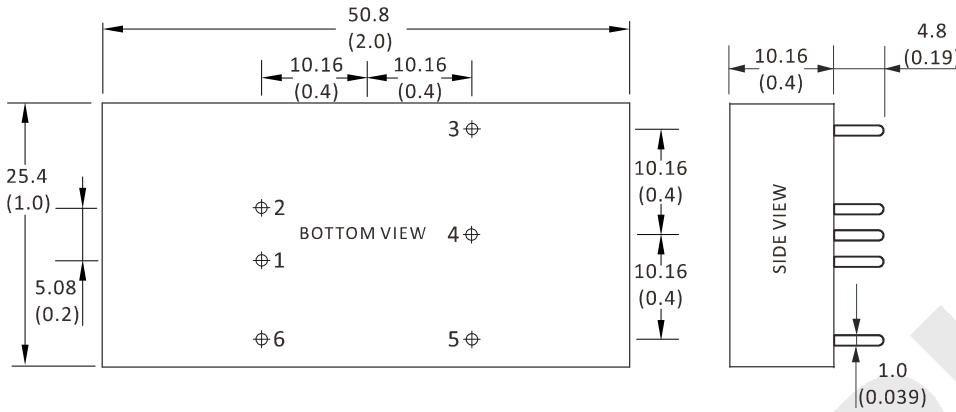
**DHV-12W SERIES, 12WATT, 4:1 INPUT RANGE**
**ELECTRICAL**

|                                 |                            |                           |
|---------------------------------|----------------------------|---------------------------|
| Output voltage accuracy         | +Vo                        | ±2% max.                  |
|                                 | -Vo                        | ±3% max.                  |
| Line regulation                 | Nominal Load, full voltage | ±0.5% max.                |
| Load regulation                 | 20% ~ 100% rated load      | ±1% max.                  |
| Ripple and noise                | 20MHz BM, full load        | 120mVp-p max.             |
| Operating frequency             | Typical value              | 300KHz typ.               |
| Isolation voltage<br>(<1mA/min) | Input to output            | 1500Vdc                   |
| 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 |
| Cooling method                  | ---                        | Cooling by air convection |
| Relative humidity               | ---                        | 10%-90% max.              |
| Weight                          | ---                        | 35g                       |
| MTBF                            | Bellcore TR-332, 25°C      | 1000KHrs                  |

**Notes: Unless otherwise specified, all the parameters of the test conditions are as follows: ambient temperature 25°C, the nominal input voltage, pure resistive nominal load.**

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MECHANICAL



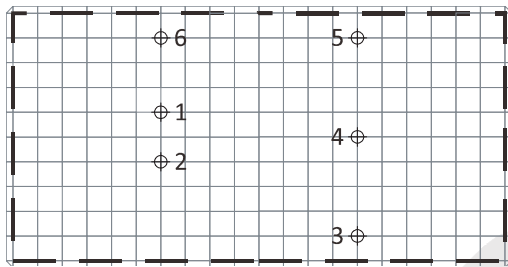
CONNECTION

| PIN # | SINGLE | DUAL   |
|-------|--------|--------|
| 1     | GND    | GND    |
| 2     | +Vin   | +Vin   |
| 3     | +Vo    | +Vo    |
| 4     | No Pin | 0V     |
| 5     | 0V     | -Vo    |
| 6     | No Pin | No Pin |

Note:

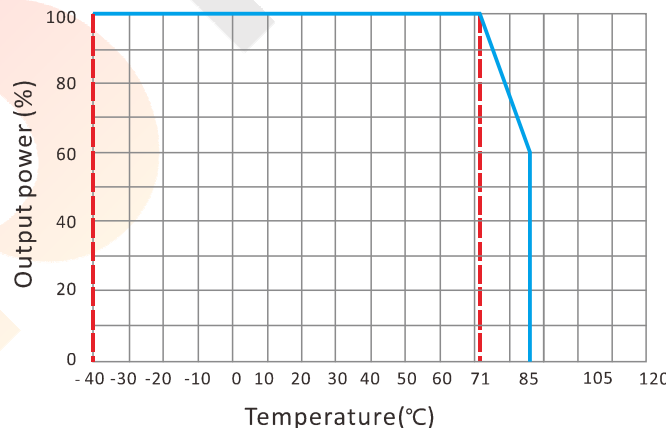
\* Unit is mm(inch).

LAYOUT



Unit: mm(inch)  
 PCB vertical view  
 Grid spacing: 2.54mm(0.1inch)

ELECTRICAL CURVE

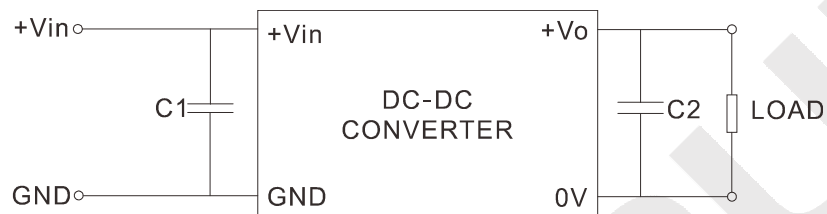


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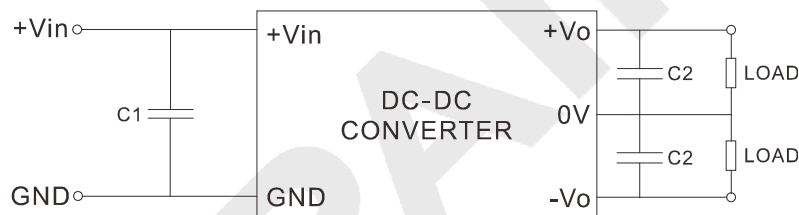
NOTES

RECOMMENDED TEST AND APPLICATION CIRCUIT

SINGLE OUTPUT



DUAL OUTPUT



CAPACITOR SELECTION

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