

**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;
3. Add suffix "C" for CTRL pin function.

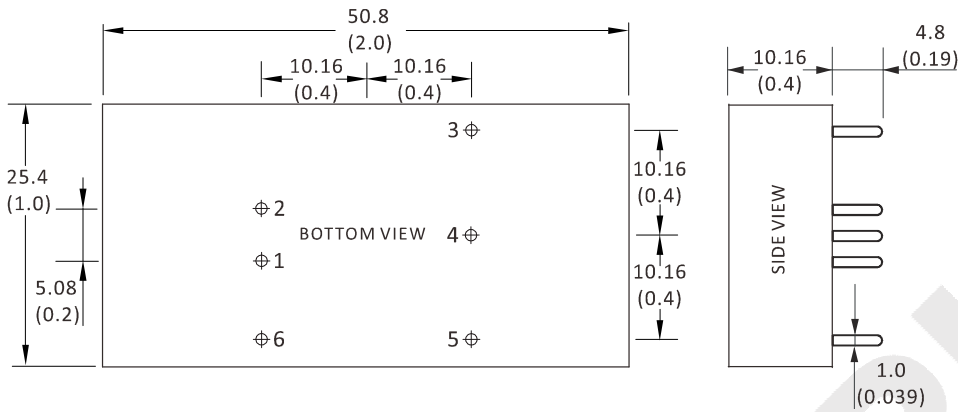
**DHV-12W SERIES, 12WATT, 4:1 INPUT RANGE**

**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 (<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
CTRL*	Turn on	Hang or connect high level(3.5-12Vdc)
	Turn off	Connect -Vin or low level(0-1.2Vdc)
	Shut off input current	1mA typ.
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.**

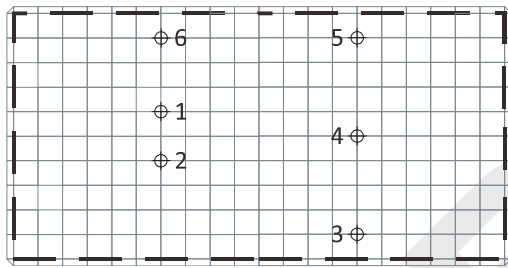
**\* The voltage of "CTRL" pin is almost equal to input "-Vin" pin**

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

**CONNECTION**

PIN #	SINGLE	DUAL
1	GND	GND
2	+Vin	+Vin
3	+Vo	+Vo1
4	No Pin	0V
5	0V	-Vo2
6	No Pin	No Pin

**CONNECTION - "CTRL"**

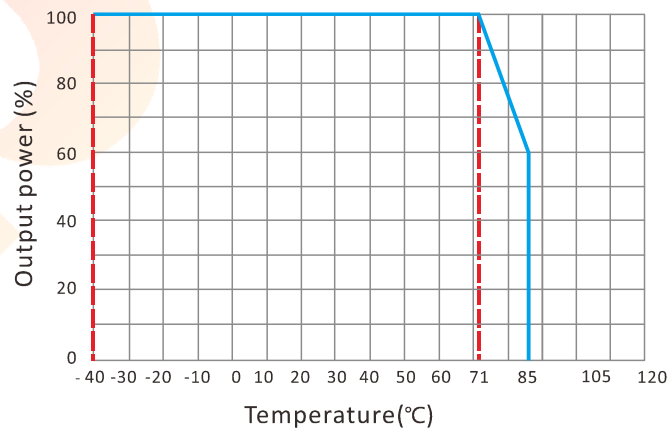
1	-Vin	-Vin
2	+Vin	+Vin
3	+Vo	+Vo1
4	No Pin	0V
5	GND	-Vo2
6	CTRL	CTRL

**LAYOUT**


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

Note:

\* Unit is mm(inch).

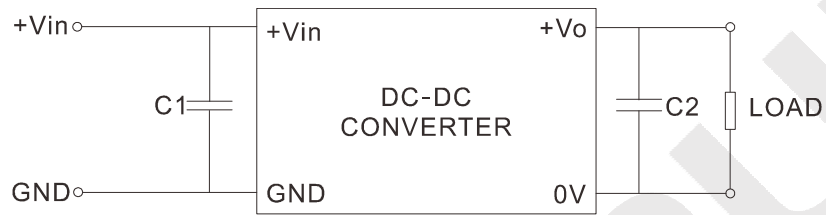
**ELECTRICAL CURVE**


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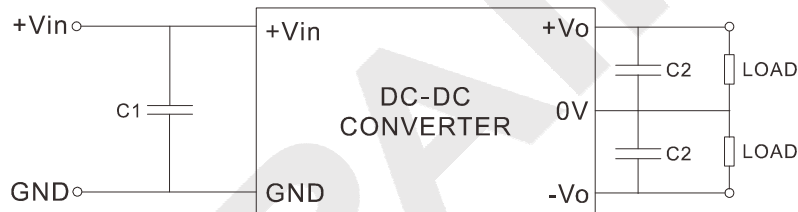
NOTES

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