

**DHV-15W SERIES, 15WATT, 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.
DHV15W-2411	24(9~36)	5	3000	81%
DHV15W-2415		9	1667	83%
DHV15W-2412		12	1250	84%
DHV15W-2413		15	1000	84%
DHV15W-2414		24	625	85%
DHV15W-2421		±5	±1500	81%
DHV15W-2425		±9	±833	82%
DHV15W-2422		±12	±625	84%
DHV15W-2423		±15	±500	84%
DHV15W-2424		±24	±313	85%
DHV15W-4811	48(18~72)	5	3000	81%
DHV15W-4815		9	1667	83%
DHV15W-4812		12	1250	84%
DHV15W-4813		15	1000	84%
DHV15W-4814		24	625	85%
DHV15W-4821		±5	±1500	81%
DHV15W-4825		±9	±833	83%
DHV15W-4822		±12	±625	84%
DHV15W-4823		±15	±500	84%
DHV15W-4824		±24	±313	85%

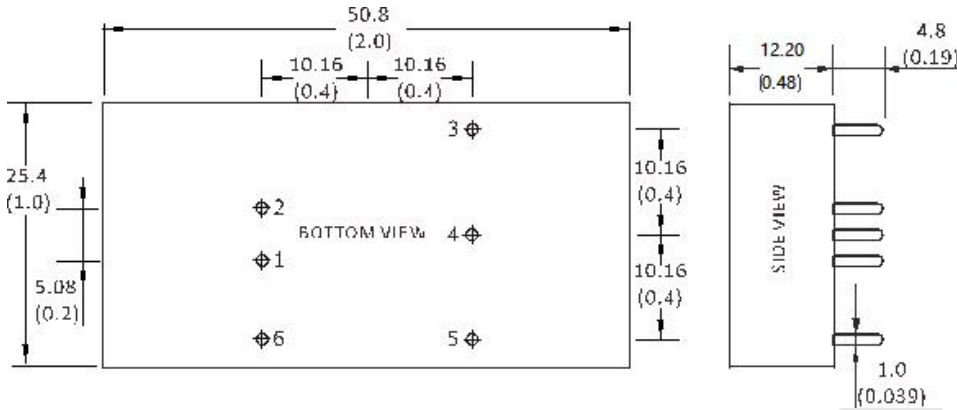
**Notes:**

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

**DHV-15W SERIES, 15WATT, 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	150mVp-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
Cooling method	---	Cooling by air convection
Relative humidity	---	10%-90% max.
Weight	---	35g
MTBF	Bellcore TR-332, 25°C	1000KHrs

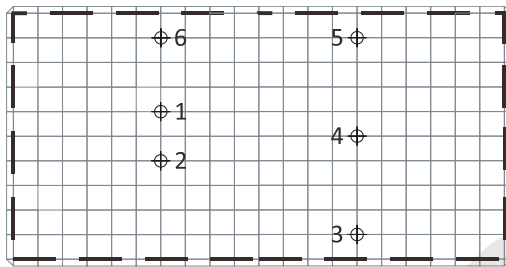
**Notes: Unless otherwise specified, all the parameters of the test conditions are as follows: ambient temperature 25°C, the nominal input voltage, pure resistive nominal load.**

**DHV-15W SERIES, 15WATT, 4:1 INPUT RANGE**
**MECHANICAL**

**CONNECTION**

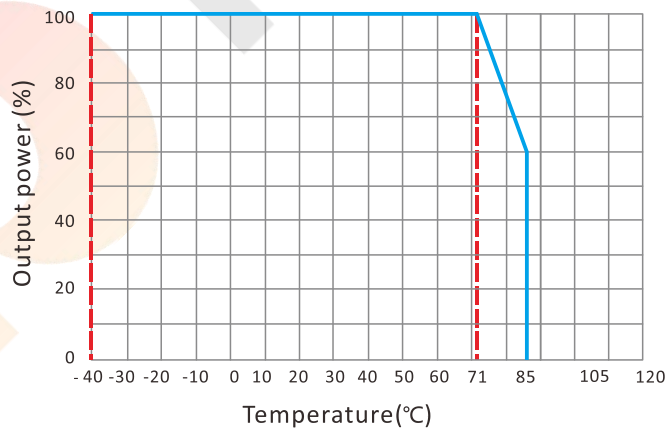
PIN #	SINGLE	DUAL
1	GND	GND
2	+Vin	+Vin
3	+Vo	+Vo
4	No Pin	0V
5	0V	-Vo
6	No Pin	No Pin

Note:

\* Unit is mm(inch).

**LAYOUT**


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

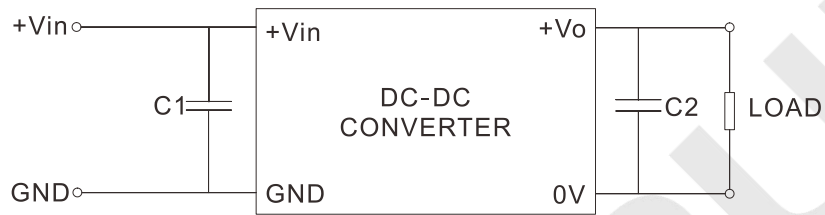
**ELECTRICAL CURVE**


DHV-15W SERIES, 15WATT, 4:1 INPUT RANGE

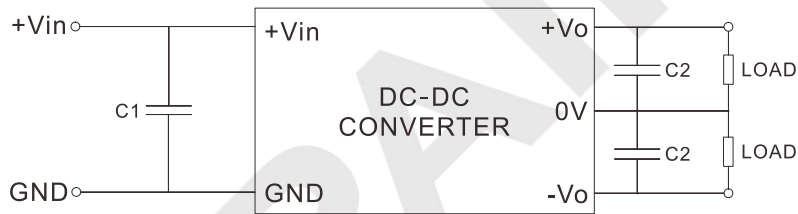
NOTES

RECOMMENDED TEST AND APPLICATION CIRCUIT

SINGLE OUTPUT



DUAL OUTPUT



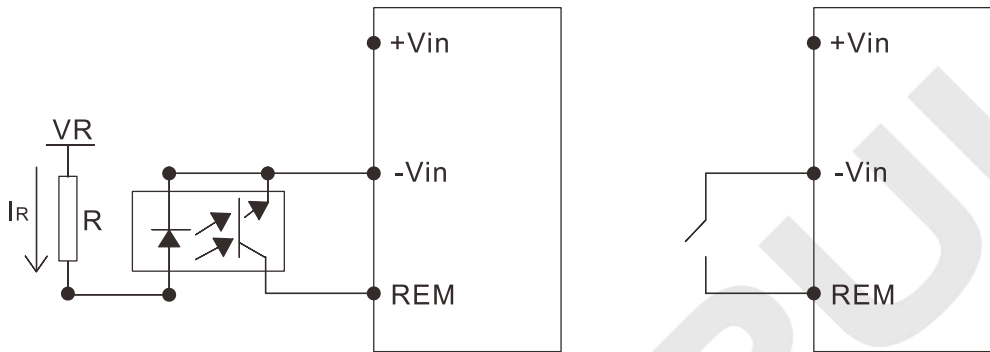
CAPACITOR SELECTION

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	100 $\mu$ F	$\pm$ 24VDC	47 $\mu$ F

DHV-15W SERIES, 15WATT, 4:1 INPUT RANGE

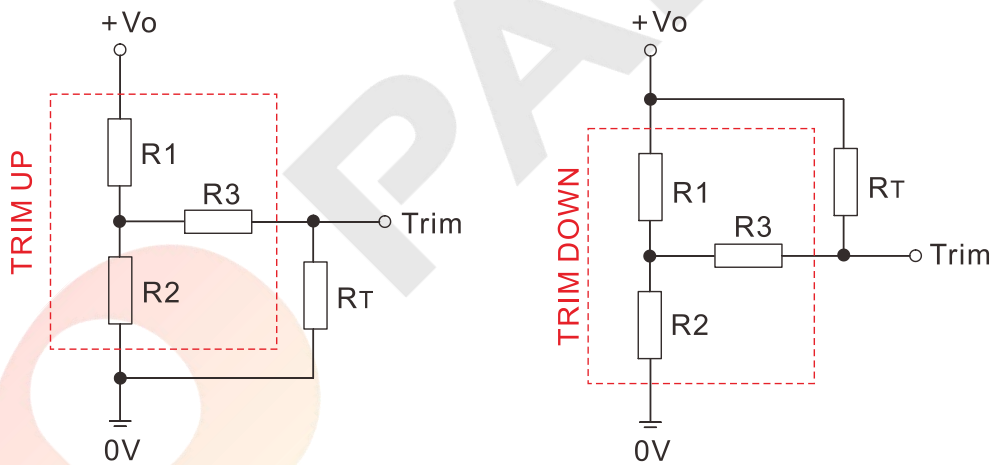
NOTES

**\*APPLICATION FOR REM PIN**



The REM pin can be hang on if unnecessary to use, the output current will shut off when REM voltage lower than 0.5Vdc.

**\*APPLICATION FOR TRIM PIN**



$$\text{TRIM UP: } R_T = \frac{xR_2}{R_2-x} - R_3 \quad x = \frac{V_{ref}}{V_o' - V_{ref}} * R_1$$

$$\text{TRIM DOWN: } R_T = \frac{xR_1}{R_1-x} - R_3 \quad x = \frac{V_o' - V_{ref}}{V_{ref}} * R_2$$

Vo[Vdc]	R1[KΩ]	R2[KΩ]	R3[KΩ]	Vref[Vdc]
5	2.883	2.864	10	2.5
12	10.971	2.864	17.8	2.5
15	14.497	2.864	17.8	2.5
24	24.872	2.863	20	2.5

RT represents Trim resistor

X represents self-defined parameters without real meaning