DMV-30 SERIES, 30WATT, 2:1 INPUT RANGE

FEATURES:

- ✓ 2 year warranty
- ✓ Six-side shielded metal case
- ✓ Low ripple and noise
- ✓ Over current and short circuit protection
- ✓ Remote on/off
- ✓ Adjustable output voltage

Model	Input voltage (Vdc)	Output voltage (Vdc)	Output current (A)	Efficiency Typ.
DMV30-1215	12(9~18)	3.3	6	82%
DMV30-1211		5	6	82%
DMV30-1216		9	3.3	78%
DMV30-1212		12	2.5	87%
DMV30-1213		15	2	87%
DMV30-1214		24	1.25	87%
DMV30-1221		±5	3	82%
DMV30-1223		±9	1.65	78%
DMV30-1222		±12	1.25	87%
DMV30-1224		±15	1	78%
DMV30-1225		±24	0.625	78%
DMV30-2411	24(18~36)	5	6	82%
DMV30-2416		9	3.3	78%
DMV30-2412		12	2.5	87%
DMV30-2413		15	2	87%
DMV30-2414		24	1.25	87%
DMV30-2421		±5	3	82%
DMV30-2423		±9	1.65	78%
DMV30-2422		±12	1.25	87%
DMV30-2424		±15	1	78%
DMV30-2425		±24	0.625	78%
DMV30-4811	48(36~72)	5	6	82%
DMV30-4816		9	3.3	78%
DMV30-4812		12	2.5	87%
DMV30-4813		15	2	87%
DMV30-4814		24	1.25	87%
DMV30-4821		±5	3	82%
DMV30-4823		±9	1.65	78%
DMV30-4822		±12	1.25	87%
DMV30-4824		±15	1	78%
DMV30-4825		±24	0.625	78%

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Model	Input voltage (Vdc)	Output voltage (Vdc)	Output current (A)	Efficiency Typ.
DMV30-11011	110(72~144)	5	6	82%
DMV30-11016		9	3.3	78%
DMV30-11012		12	2.5	87%
DMV30-11013		15	2	87%
DMV30-11014		24	1.25	87%
DMV30-11021		±5	3	82%
DMV30-11023		±9	1.65	78%
DMV30-11022		±12	1.25	87%
DMV30-11024		±15	1	78%
DMV30-11025		±24	0.625	78%

Notes:

1. Other input and output models may available on request;

2. Above models are default to metal case.

ELECTRICAL

Input voltage range	12V	9-18Vdc
	24V	18-36Vdc
	48V	36-72Vdc
	110V	72-144Vdc
Remote control	High level or vacant	Turn on
(Low level remote)	Low level or connect ground	Turn off
Output voltage accuracy	---	Vo1, Vo2: ±1%, ±3%
Output voltage adjustable	---	±10% max.
Line regulation	Nominal Load, full voltage	Vo1, Vo2: ±0.2%, ±1.5%
Load regulation	20% ~ 100% rated load	Vo1, Vo2: ±0.5%, ±4%
Dynamic response (transient/recovery time)	5%-50%-75% load capability	ΔVo1/Δt: ±4.0%/500μs
Ripple and noise	20MHz BM, full load	Vo≤5.0V, ≤50mVp-p Vo≥48V, ≤180mVp-p Other, ≤100mVp-p
Isolation voltage	Input to output	1500Vdc
(<2mA/min)	Input to case	500Vdc
Switching frequency	300KHz	330KHz max.
Turn-on delay time	---	≤200ms
Operating temperature range	Free air	-25℃ to +55℃
Storage temperature range	---	-45℃ to +105℃
Input under voltage protection	When input voltage is lower than the low input voltage	Auto-recovery

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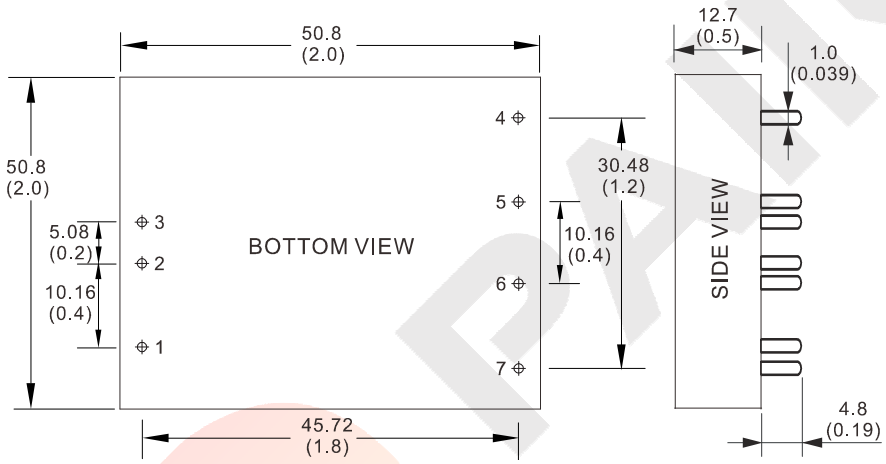
ELECTRICAL

Over current protection	---	Auto-recovery
Short circuit protection	---	Continuous auto-recovery
Cooling method	---	Cooling by air convection
Relative humidity	---	10%-90% max.
Weight	---	61.8g
MTBF	Bellcore TR-332, 25℃	$2x10^5$Hrs

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

MECHANICAL



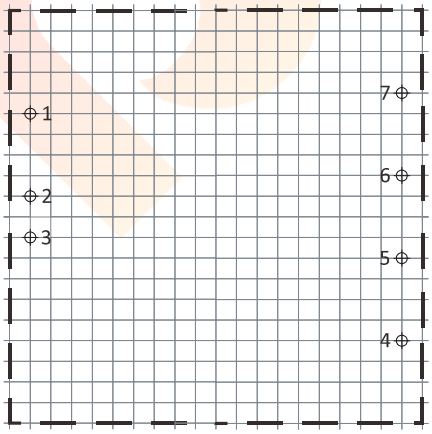
CONNECTION

PIN #	SINGLE	DUAL
1	REM	REM
2	-Vin	-Vin
3	+Vin	+Vin
4	No pin	+Vo1
5	+Vo	COM
6	GND	-Vo2
7	TRIM	TRIM

Note:

* Unit is mm(inch).

LAYOUT



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

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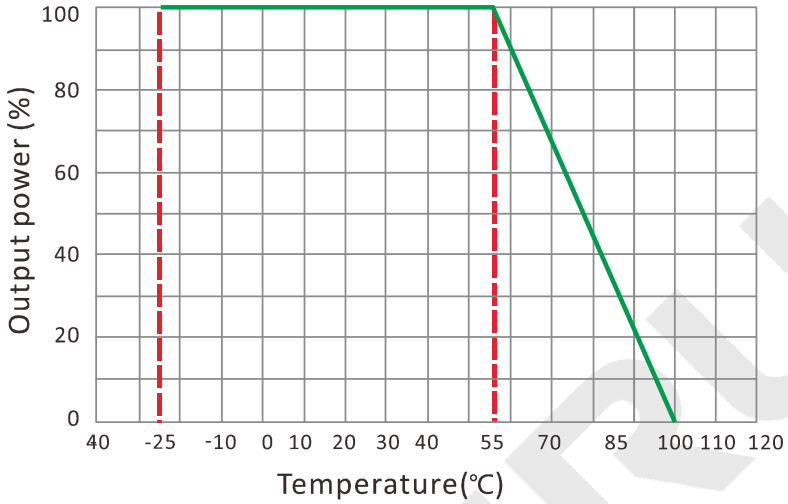
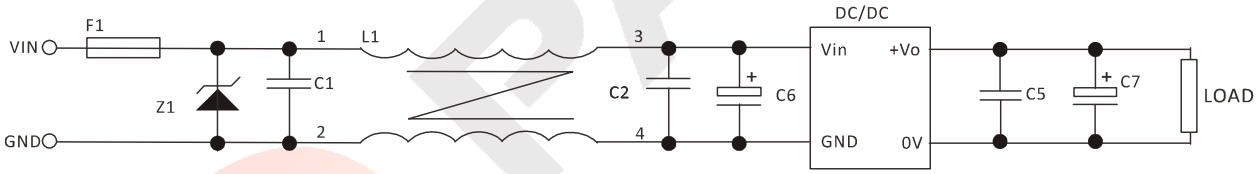
ELECTRICAL CURVE



NOTES

RECOMMENDED TEST AND APPLICATION CIRCUIT



1. TVS&FUSE be helpful with over voltage protection and inrush limiting. Recommended FUSE better be 1.5~2times of the rated current .
2. The input filter capacitor C6 could select the aluminum electrolytic capacitors or tantalum capacitors, and the withstand voltage should be greater than the highest input voltage. Recommended capacitor should be between 22μF~100μF.
3. C1,C2 for the input filter capacitor,0.1~1μF high-frequency ceramics capacitor or chip capacitor are recommended. The withstand voltage of output filter C5, C7 should be greater than the highest output voltage. Recommended capacitor of C7 better within 100μF and C5 connected with the chip to reduce the input voltage peak, recommended 0.1~1μF high-frequency ceramics capacitor or chip capacitor.