DNV-15 SERIES, 15WATT, 2:1 INPUT RANGE

FEATURES:

- ✓ **3 years warranty**
- ✓ **1500Vac isolation voltage**
- ✓ **Six-side shielded metal case with low ripple and noise**
- ✓ **Operating temperature range -40°C to +85°C**
- ✓ **Over voltage, over current, short circuit protection**

Model	Input voltage (Vdc)	Output voltage (Vdc)	Output current (mA)	Efficiency Typ.
DNV15-1211	12(9~18)	3.3	4000	85%
DNV15-1212		5.1	3000	87%
DNV15-1213		12.1	1200	87%
DNV15-1214		15.1	1000	89%
DNV15-1215		24.2	800	89%
DNV15-2411	24(18~36)	3.3	4000	87%
DNV15-2412		5.1	3000	89%
DNV15-2413		12.1	1200	89%
DNV15-2414		15.1	1000	90%
DNV15-2415		24.2	800	90%
DNV15-4811	48(36~72)	3.3	4000	87%
DNV15-4812		5.1	3000	89%
DNV15-4813		12.1	1200	89%
DNV15-4814		15.1	1000	90%
DNV15-4815		24.2	800	90%
DNV15-11011	110(66~160)	5.1	3000	89%
DNV15-11012		12.1	1200	89%
DNV15-11013		15.1	1000	90%
DNV15-11014		24.2	800	90%

Notes:

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

2.You may request for the models with heatsink, plus "R" in the suffix, e.g. DNV15-1211R.

ELECTRICAL

Output voltage accuracy	---	≤1%
Line regulation	Nominal Load, full voltage	±0.2% max.
Load regulation	20% ~ 100% rated load	±0.5% max.

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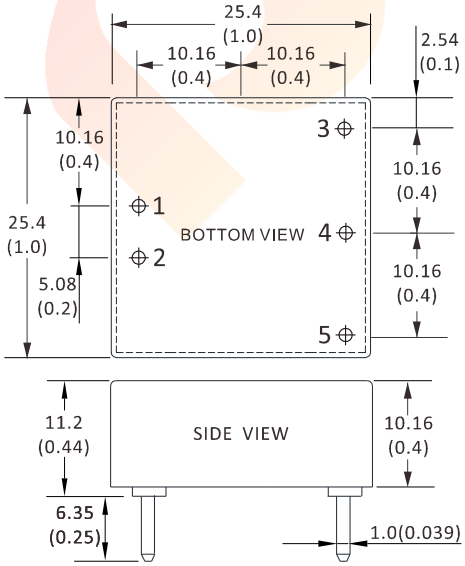
ELECTRICAL

Dynamic response (transient/recovery time)	5%-50%-75% load capability	ΔVo/Δt: ±5.0%/500μs
Ripple and noise	20MHz BM, full load	1% Vout max.
Isolation voltage (<2mA/min)	Input to output	1500Vac
	Input to case	1000Vac
	Output to case	500Vac
Isolation resistance	500Vdc	20MΩ
Temperature coefficient	---	±0.02%/°C max.
Operating temperature range	Auxiliary heat sink	-40°C to +85°C
Storage temperature range	---	-45°C to +120°C
Over current protection	---	Auto-recovery
Short circuit protection	---	Continuous auto-recovery
Over voltage protection	---	Auto-recovery
Relative humidity	---	10%-90% max.
Weight	Heat sink	30g
Conducted emission	---	CLASS A
MTBF	Bellcore TR-332, 25°C	$2x10^5$Hrs

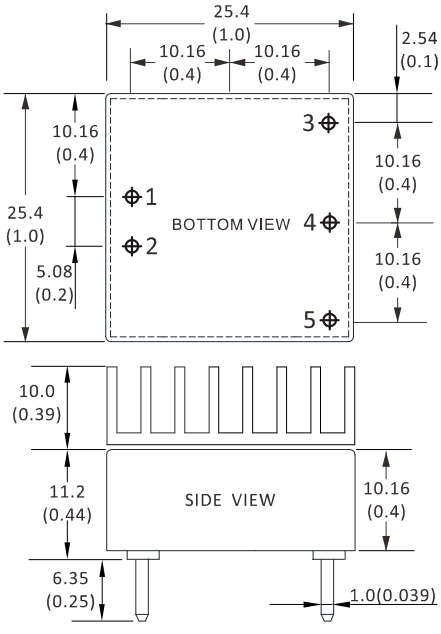
Notes: Unless otherwise specified, all the parameters of the test conditions are as follows: ambient temperature 25℃, the nominal input voltage, pure resistive nominal load.

MECHANICAL

WITHOUT HEATSINK



WITH HEATSINK



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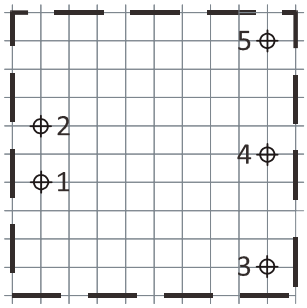
MECHANICAL

PCB LAYOUT



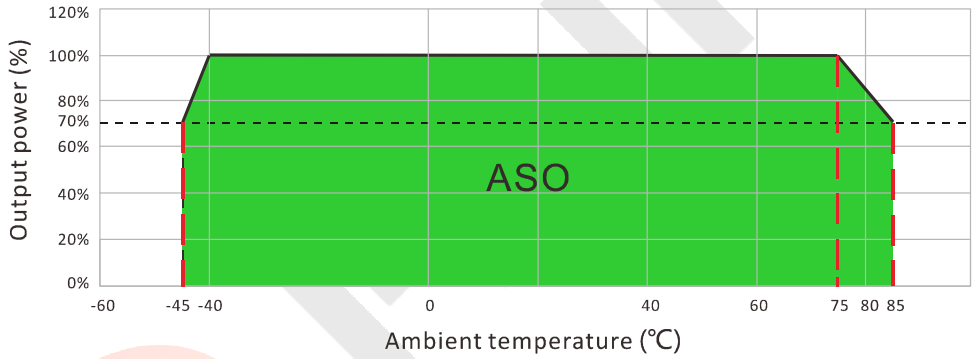
Unit : mm(inch)
PCB vertical view
Grid spacing: 2.54mm(0.1inch)

CONNECTION

PIN #	SINGLE
1	+Vin
2	-Vin
3	+Vo
4	No Pin
5	GND

Note:
* Unit is mm(inch).

TEMPERATURE PROFILE



CAPACITIVE LOADS SELECTION

Vout: 3.3V 5V		Vout: 12V 5V		Vout: 24V	
Recommended value	MAX. value	Recommended value	MAX. value	Recommended value	MAX. value
10000μF	15000μF	1000μF	2200μF	470μF	1000μF

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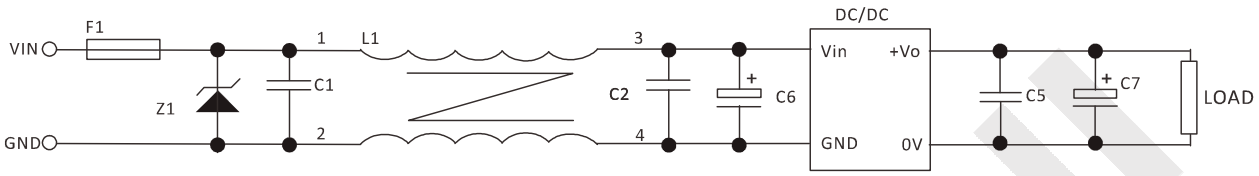
NOTES

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.