BAQ SERIES, 1/4 BRICK, UP TO 200W

FEATURES:

- ✓ 5 years warranty
- ✓ Output current up to 30A
- ✓ 1500Vdc isolation voltage
- ✓ Efficiency up to 93%
- ✓ Operating temperature range -40°C to +85°C
- ✓ Under voltage, over current, short circuit, over voltage protection
- ✓ Remote on/off
- ✓ Adjustable output voltage

Model	Input voltage (Vdc)	Output voltage (Vdc)	Output current (A)	Efficiency Typ.
BAQ24-33V25	24(18~36)	3.3	25.00	88%
BAQ24-50V10		5.0	10.00	90%
BAQ24-50V15		5.0	15.00	91%
BAQ24-50V20		5.0	20.00	90%
BAQ24-50V30		5.0	30.00	90%
BAQ24-120V4		12.0	4.20	90%
BAQ24-120V8		12.0	8.33	93%
BAQ24-120V17		12.0	16.67	93%
BAQ48-12V20	48(36~72)	1.2	20.0	87%
BAQ48-12V25		1.2	25.0	87%
BAQ48-12V30		1.2	30.0	87%
BAQ48-15V25		1.5	25.0	88%
BAQ48-18V10		1.8	10.0	88%
BAQ48-18V15		1.8	15.0	88%
BAQ48-18V20		1.8	20.0	89%
BAQ48-18V25		1.8	25.0	88%
BAQ48-18V30		1.8	30.0	88%
BAQ48-25V10		2.5	10.0	89%
BAQ48-25V15		2.5	15.0	91%
BAQ48-25V20		2.5	20.0	91%
BAQ48-25V25		2.5	25.0	91%
BAQ48-25V30		2.5	30.0	88%
BAQ48-33V10		3.3	10.0	88%
BAQ48-33V15		3.3	15.0	91%
BAQ48-33V20		3.3	20.0	91%
BAQ48-33V25		3.3	25.0	91%

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Model	Input voltage (Vdc)	Output voltage (Vdc)	Output current (A)	Efficiency Typ.
BAQ48-33V30	48(36~72)	3.3	30.0	91%
BAQ48-33V35		3.3	35.0	91%
BAQ48-50V6		5.0	6.0	89%
BAQ48-50V10		5.0	10.0	93%
BAQ48-50V15		5.0	15.0	91%
BAQ48-50V20		5.0	20.0	94%
BAQ48-50V25		5.0	25.0	90%
BAQ48-50V30		5.0	30.0	91%
BAQ48-120V8		12.0	8.3	91%
BAQ48-120V10		12.0	10.0	92%
BAQ48-120V13		12.0	12.5	91%
BAQ48-120V25		12.0	25.0	93%

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. BAQ24-33V25R.

ELECTRICAL

Input voltage range	24Vdc	18-36Vdc
	48Vdc	36-72Vdc
Remote control	Negative logic	OFF: High level or left close ON: Low level or grounded
	Positive logic	ON: High level or left open OFF: Low level or grounded
Output power	Input voltage range	30-200W
Output voltage	Single output	1.2/1.5/1.8/2.5/3.3/5/12Vdc
Output voltage accuracy	Input voltage range	±1%
Output voltage adjustable	Positive logic	±10%
Line regulation	Full load	±0.2%
Load regulation	10%-100% full load	±0.5%
Dynamic response (transient/recovery time)	25%-50%-75% load capability	ΔVo/Δt: ±4.0%/500μs
Ripple and noise	Parallel test, 20MHz wide range	Output=12V, 200mVp-p Other, 100mVp-p max.
Operating frequency	Typical	300KHz typ.
Isolation voltage	Input to output	1500Vdc
	Input to case	1050Vdc
	Output to case	500Vdc
Isolation resistance	---	10MΩ

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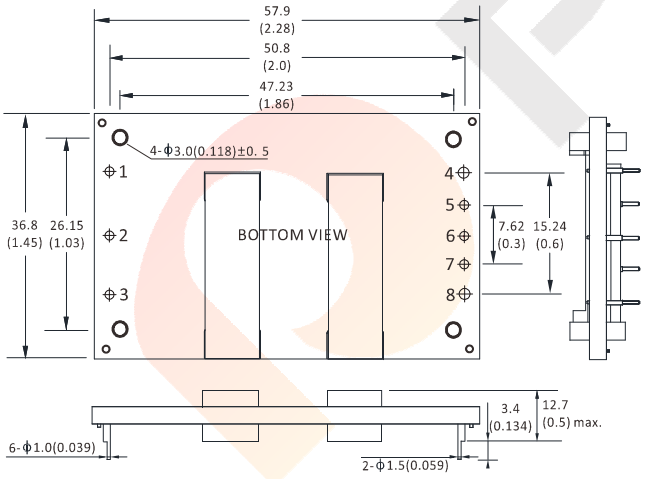
ELECTRICAL

Safety	---	IEC-60950-1, UL-60950-1 EN-60950-1, GB4943
Temperature coefficient	---	200ppm
Operating temperature range	Auxiliary heat sink	-40°C to +85°C
Storage temperature range	---	-40°C to +125°C
Over temperature protection	Typical	110°C typ.
Under voltage protection	---	Yes
Over current protection	---	Yes
Short circuit protection	---	Yes
Over voltage protection	---	Yes
Relative humidity	---	95% max.
MTBF	Bellcore TR-332, 25°C	2x10^{6}Hrs

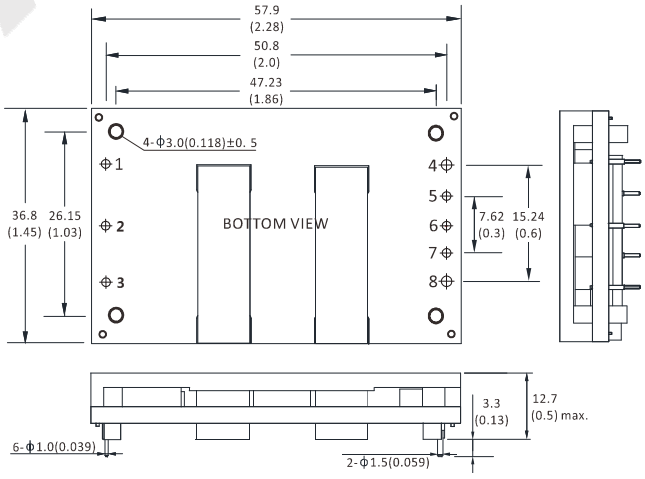
Notes: Unless otherwise specified, all the parameters of the test conditions are as follows: ambient temperature 25℃, the nominal input voltage, pure resistive nominal load.

MECHANICAL

WITHOUT HEATSINK



WITH HEATSINK



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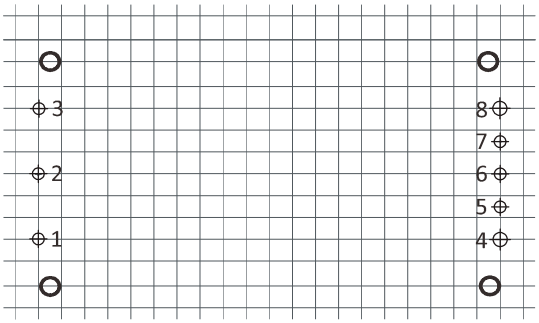
MECHANICAL

PCB LAYOUT



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

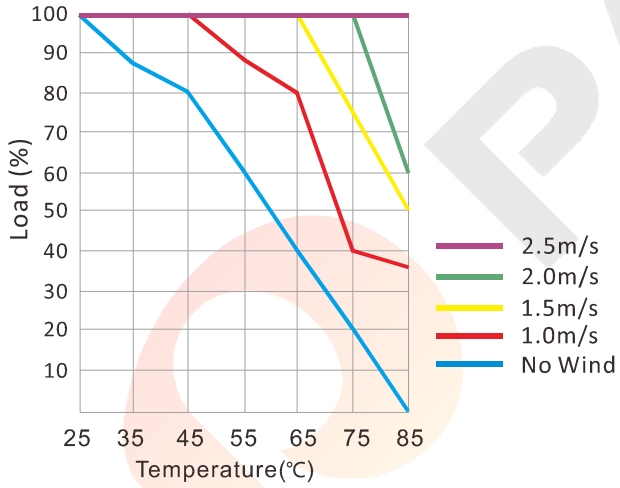
CONNECTION

PIN #	SINGLE
1	-Vin
2	REM
3	+Vin
4	GND
5	-S
6	TRIM
7	+S
8	+Vo

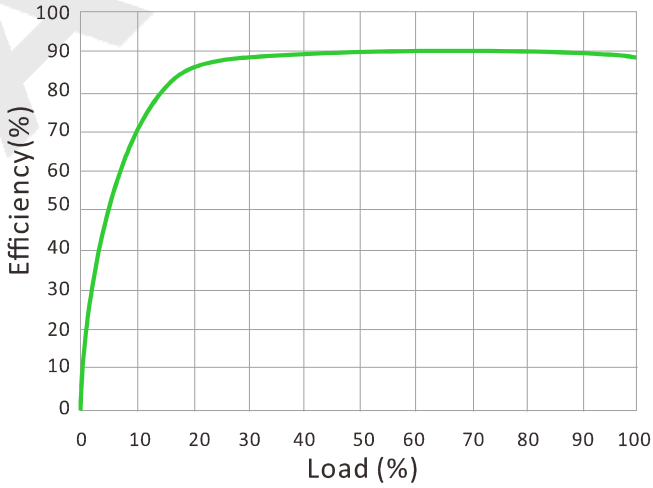
Note:

* Unit is mm(inch).

DERATING CURVE



EFFICIENCY CURVE



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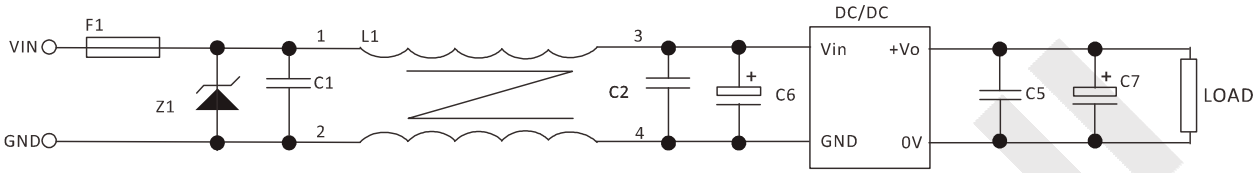
NOTES

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.