

BAF SERIES, FULL BRICK, UP TO 300W

FEATURES:

- √ 5 years warranty
- √ 1500Vdc isolation voltage
- ✓ Wide(2:1) input voltage range
- ✓ Operating temperature range -40°C to +100°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. |
|--------------|------------------------|-------------------------|-----------------------|--------------------|
| BAF48-50V60 | | 5.0 | 60.0 | 86% |
| BAF48-120V25 | 48(36~72) | 12.0 | 25.0 | 86% |
| BAF48-240V13 | | 24.0 | 12.5 | 85% |

Notes: other input and output models may available on request.

| ELECTRICAL | | | |
|--|-------------------------------------|----------------------------|--|
| Input voltage range | 48Vdc | 36-72Vdc | |
| Remote control | Positive logic | ON: High level or open | |
| Remote control | Positive logic | OFF: Low level or grounded | |
| Output power | Input voltage range | 300W | |
| Output voltage | Single output | 5/12/24Vdc | |
| Output voltage accuracy | Input voltage range,full load range | ±1% | |
| Output voltage adjustable | Negative logic | | |
| 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 | 200mVp-p max. | |
| Operating frequency | Typical value | 300KHz typ. | |
| | Input to output | 1500Vdc | |
| Isolation voltage | Input to case | 1050Vdc | |
| | Output to case | 500Vdc | |
| Isolation resistance | | 100ΜΩ | |
| Safety | | EN-60950 | |
| Temperature coefficient | | 200ppm | |
| Operating temperature range | | -40°C to +100°C | |
| Storage temperature range | | -40°C to +105°C | |
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| ELECTRICAL | | |
|---------------------------------|-----------------------|-----------------------|
| Over temperature protection | Typical | 105°C typ. |
| Under voltage protection | | Yes |
| Output over current protection | | Yes |
| Output short circuit protection | | Yes |
| Output over voltage protection | | Yes |
| Relative humidity | | 95% max. |
| Packing | | Hole package |
| MTBF | Bellcore TR-332, 25°C | 2x10 ⁶ Hrs |

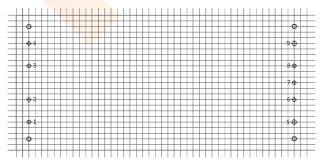
Notes: Unless otherwise specified, all the parameters of the test conditions are as follows: ambient temperature 25°C, the nominal input voltage, pure resistive nominal load.

MECHANICAL 116.84 12.7 (4.6)(0.5)106.68 (4.2)0 4-**φ** 3.0(0.12) **\$ 1** 5 ♦ Φ 2 6 ♦ 61.0 35.56 15.24 50.8 **BOTTOM VIEW** (2.4)(1.4)(0.6) (2.0) ф1.0(0.039) Ф 3 **\$ 4** 9 ↔ 0 0 4.6 (0.18)

| CONNECTION | | | |
|------------|--|--|--|
| SINGLE | | | |
| -Vin | | | |
| FG | | | |
| REM | | | |
| +Vin | | | |
| GND | | | |
| -S | | | |
| TRIM | | | |
| +S | | | |
| +Vo | | | |
| | | | |

PCB LAYOUT

Note:



Unit: mm(inch)
PCB vertical view

Grid spacing: 2.54mm(0.1inch)

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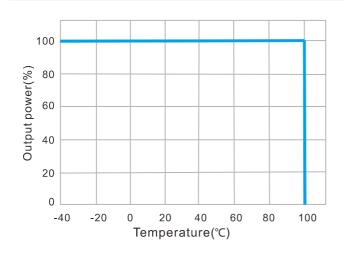
^{*} Unit is mm(inch).

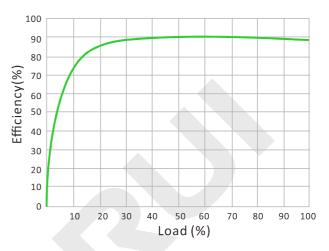


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DERATING CURVE

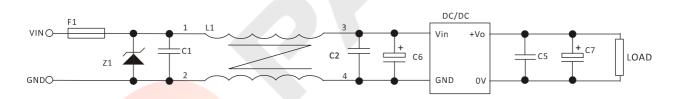
EFFICIENCY CURVE





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 22μ F $^{-}100\mu$ F.
- 3. C1,C2 for the input filter capacitor, $0.1^{\sim}1\mu\text{F}$ 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 $100\mu\text{F}$ and C5 connected with the chip to reduce the input voltage peak, recommended $0.1^{\sim}1\mu\text{F}$ high-frequency ceramics capacitor or chip capacitor.

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