POWER

BCQ1300 & BDQ1300 Series

Data Sheet

1300 W Quarter brick

Total Power: 1300 W
Input Voltage: 40 - 60 Vdc
# of Outputs: Single



SPECIAL FEATURES

- Delivers up to 1300 W
- Ultra-high efficiency above 97%
- Startup Pre-bias
- Input range: 40 V – 60 V
- PMBus™ function (BDQ1300)
- Parallel current sharing (BCQ1300)
- Excellent thermal performance
- No minimum load requirement
- Fixed switching frequency
- Base-plate for contact cooling or heatsink mounting
- ROHS 3.0 (2011/65/EU) compliant
- Input under voltage lockout
- Input over voltage lockout
- Output over current protection
- Output over voltage protection (BDQ1300)
- Over temperature protection
- Pin length option: 4.6 mm

SAFETY

- IEC/EN/UL/CSA 62368-1
- CE
- UL/TUV
- UL94,V-0

Electrical Specifications

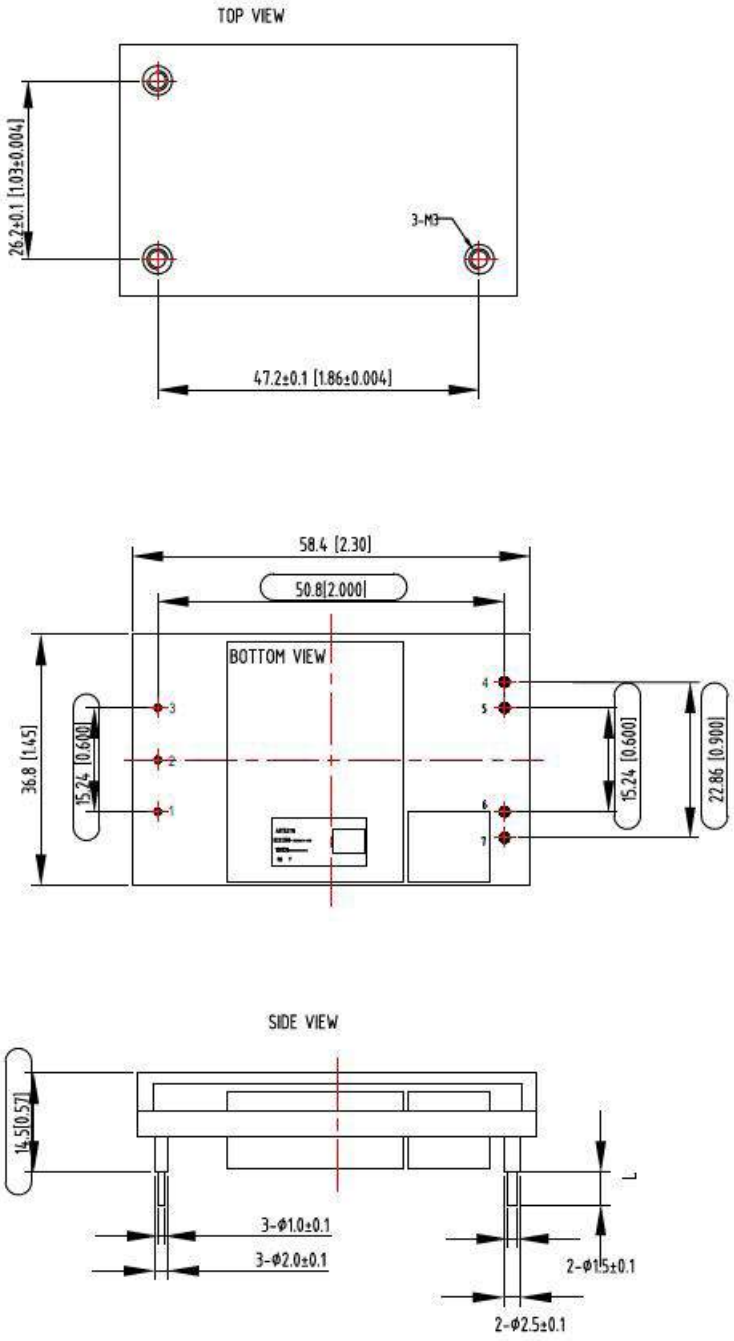
	BCQ1300	BDQ1300
Input		
Input range	40-60 Vdc	40-60 Vdc
Efficiency (50% load)	97.7%	97.5%
Output		
Factory set voltage	13.13 Vdc	12.15 Vdc
Output voltage total regulation	9.6~14.5 Vdc	8.85~12.55 Vdc
Load regulation	400 mV max	120 mV max
Noise/ripple	140 mV	200 mV
Output current	90 A	107 A
Over voltage protection	NA	Hiccup, Auto-restart
Over current protection	Hiccup, Auto-restart	Hiccup, Auto-restart
Over temperature protection	Auto-recovery	Auto-recovery
Temperature coefficient	±0.02/°C	±0.02/°C
Isolation		
I/O isolation (input to output)	1500 Vdc	800 Vdc

Environmental Specifications

Operating ambient temperature range	-40 °C to +85 °C
Storage temperature	-55 °C to +125 °C
Humidity	5% to 95% (non-condensing)
MTBF	1.5 Million hours
RoHS Compliant	Yes

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An Advanced Energy Company

Mechanical Drawing and Pin Assignments (BCQ1300)

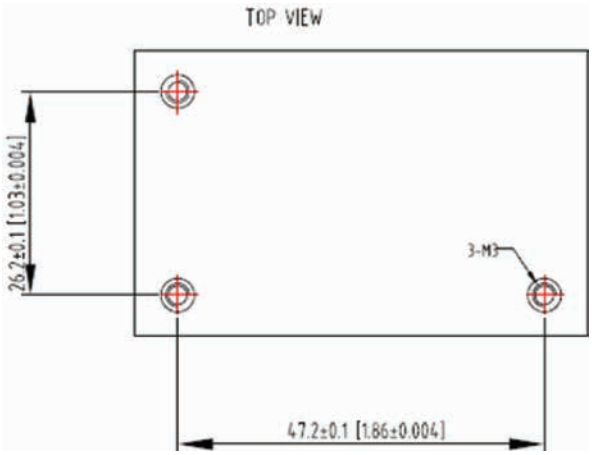


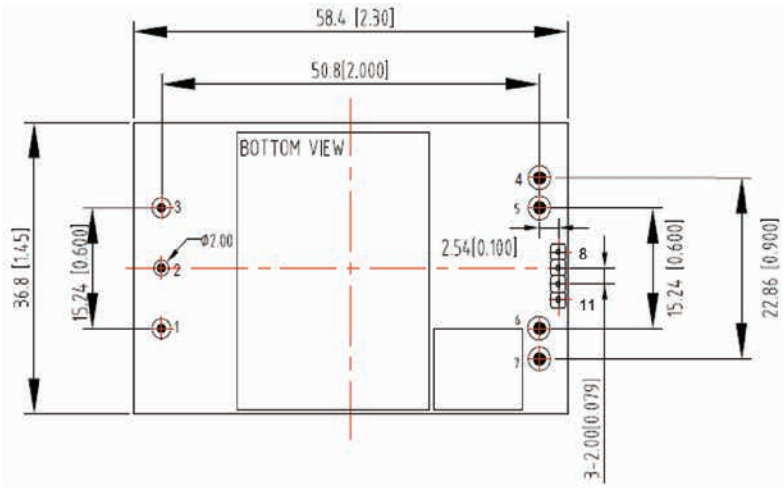
UNIT: mm (inch) L=4.60mm

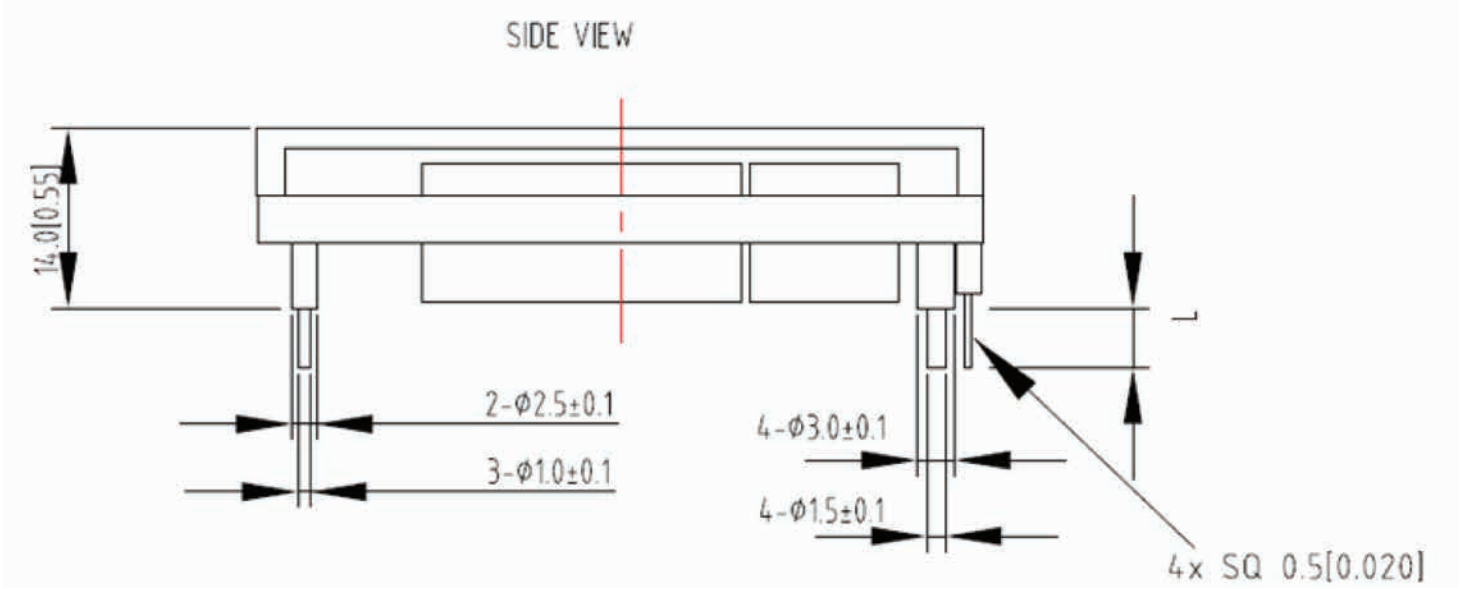
TOLERANCE: X.X mm±0.5mm [X.XX in.± 0.02in.]
X.XX mm±0.25mm[X.XXX in.±0.01in.]

Pin No	Name	Function
1	Vin+	Positive input voltage
2	Remote On/Off	Remote control
3	Vin-	Negative input voltage
4&5	Vo-	Negative output voltage
6&7	Vo+	Positive output voltage

Mechanical Drawing and Pin Assignments (BDQ1300)







UNIT: mm (inch) L=4.60mm

TOLERANCE: X.X mm±0.5mm [X.XX in.± 0.02in.]
X.XX mm±0.25mm [X.XXX in.±0.01in.]

Notes: 1. Dimensions within the box are critical dimensions.
2. BDQ1300-48S12B-4LI with pin8~11,
BDQ1300-48S12B-4L without pin8~11
3. The minimum clearance from customer PCB is 0.25 mm [0.01in.].
4. Heatsink mounting holes (M3) permit max 3.0 mm screw penetration depth into baseplate

Pin No	Name	Function
1	Vin+	Positive input voltage
2	Remote ON/OFF	Remote control
3	Vin-	Negative input voltage
4	Vo-	Negative output voltage
5	Vo-	Negative output voltage
6	Vo+	Positive output voltage
7	Vo+	Positive output voltage
8	Data	PMBus™ Data
9	Alert	PMBus™ Alert signal
10	Clock	PMBus™ Clock
11	Addr	PMBus™ Address

Notes:
1. All specifications are subject to change without notice. Mechanical drawings are for reference only.
2. Warranty: 2 years
3. Label and logo appearance may vary from what is shown on mechanical drawings.

Ordering Information

Standard	Output Voltage	Structure	Pin Tyoe	RoHS Status	PMBus™
BDQ1300-48S12B-4LI	12.15 Vdc	Baseplate	Through hole	ROHS3.0 (2011/65/EU)	Yes
BDQ1300-48S12B-4L	12.15 Vdc	Baseplate	Through hole	ROHS3.0 (2011/65/EU)	No
BCQ1300-48S12B-4L	9.6 Vdc~14.5 Vdc	Baseplated	Through hole	ROHS3.0 (2011/65/EU)	No

- Standard version is negative enable
- "-4" = 4.6 mm pin length
- "-L" = RoHS 6 compliance

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