

Q2S SERIES

Q2S Series - 30A Quarter Brick DC/DC Converter
 48V Input
 1.5V to 3.3V Output



APPLICATIONS

- Distributed Power Architectures
- Telecommunications Equipment
- LAN/WAN Applications
- Data Processing Applications

DESCRIPTION

The Q2S DC/DC converters offer unprecedented performance in the industry-standard Quarter Brick format. This is accomplished through the use of patent pending circuit and packaging techniques to achieve ultra-high efficiency, excellent thermal performance and a very low profile. The Q2S 30 A modules provide exceptional thermal performance. The low profile (<0.30") of the modules and no need for a heatsink minimize airflow shadowing, which enhances cooling for

FEATURES

- Delivers up to 30 A
- Over 20 A at 200 LFM @ 70°C
- No Heatsink Required
- Low Profile < 8 mm (0.30")
- Light Weight: 27 g (0.95 oz)
- No Minimum Load Required
- Load Capacitance: up to 30,000 μ F
- Start-up into Pre-biased Output
- Fixed-frequency Operation
- Negative and Positive Logic ON/OFF
- Remote Sense
- Wide-output Voltage Adjustment
- Fully Protected
- High Reliability
- 2000 VDC Insulation Voltage Certified
- UL 1950 Recognized, CSA C22.2 No. 950-95

downstream devices.

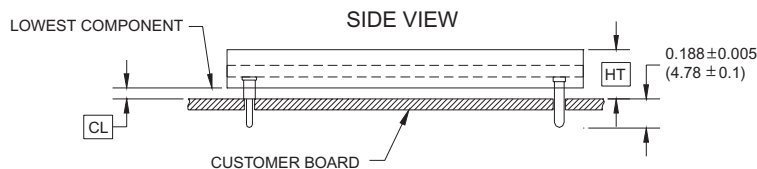
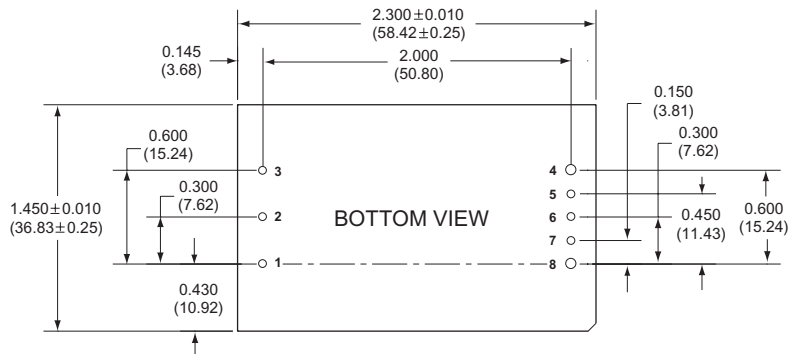
The use of 100% surface-mount technologies for Q2S assembly, coupled with advanced electronic circuitry and thermal packaging, result in products with extremely high quality and reliability. Q2S converters are available as surface-mountable and through-hole modules, in five standard output voltages ranging from 3.3 V to 1.5 V.

SELECTION CHART

| MODEL | INPUT VOLTAGE (VDC) | INPUT CURRENT MAX, ADC | OUTPUT VOLTAGE (VDC) | OUTPUT RATED CURRENT, ADC | RIPPLE & NOISE TYP, mV p-p | EFFICIENCY % | COMMENTS |
|-------------------|---------------------|------------------------|----------------------|---------------------------|----------------------------|--------------|---------------|
| Q2S30ZA-M6 | 36-75 | 1.5 | 1.5 | 30 | 30 | 83 | Surface-Mount |
| Q2S30ZB-M6 | 36-75 | 1.7 | 1.8 | 30 | 30 | 85 | Surface-Mount |
| Q2S30ZC-M6 | 36-75 | 1.9 | 2.0 | 30 | 30 | 85 | Surface-Mount |
| Q2S30ZD-M6 | 36-75 | 2.3 | 2.5 | 30 | 30 | 87 | Surface-Mount |
| Q2S30ZE-M6 | 36-75 | 3.1 | 3.3 | 30 | 30 | 88 | Surface-Mount |
| Q2S30ZA | 36-75 | 1.5 | 1.5 | 30 | 30 | 83 | Through-Hole |
| Q2S30ZB | 36-75 | 1.7 | 1.8 | 30 | 30 | 85 | Through-Hole |
| Q2S30ZC | 36-75 | 1.9 | 2.0 | 30 | 30 | 85 | Through-Hole |
| Q2S30ZD | 36-75 | 2.3 | 2.5 | 30 | 30 | 87 | Through-Hole |
| Q2S30ZE | 36-75 | 3.1 | 3.3 | 30 | 30 | 88 | Through-Hole |

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MECHANICAL DRAWING (THROUGH-HOLE)



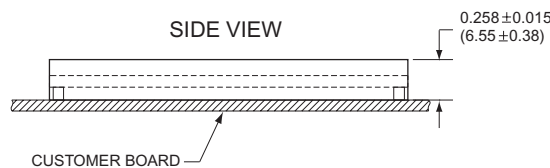
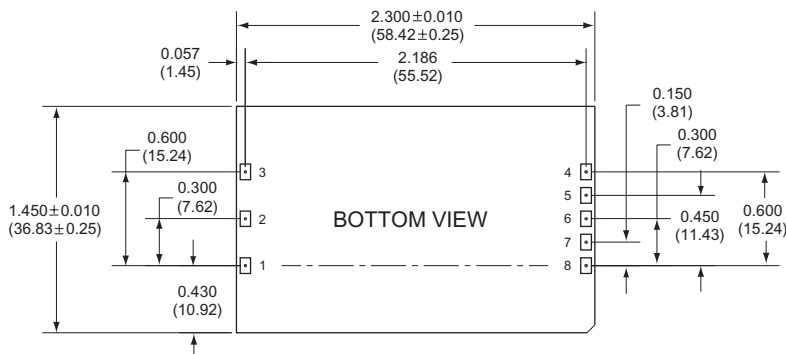
| HT (Max Height) | CL (Min Clearance) |
|-----------------|--------------------|
| +0.000 (+0.00) | +0.030 (+0.77) |
| -0.038 (-0.97) | -0.000 (-0.00) |
| 0.336 (8.53) | 0.063 (1.60) |

PIN CONNECTIONS

| PIN | FUNCTION |
|-----|---------------|
| 1 | Vin (+) |
| 2 | Remote ON/OFF |
| 3 | Vin (-) |
| 4 | Vout (-) |
| 5 | Sense (-) |
| 6 | Trim |
| 7 | Sense (+) |
| 8 | Vout (+) |

- All dimensions are in inches (mm)
- Pins 1-3 and 5-7 are ϕ 0.040" (1.02) with ϕ 0.078" (1.98) shoulder
- Pins 4 and 8 are ϕ 0.062" (1.57) without shoulder
- Pin material: Brass
- Pin Finish: Tin/Lead over Nickel
- Module Weight: 0.95 oz (27 g)

MECHANICAL DRAWING (SURFACE-MOUNT)



ORDERING INFORMATION (Consult factory for the complete list of available options.)

| OPTIONS | SUFFIXES TO ADD TO PART NUMBER WHEN ORDERING OPTIONS (ADD SEQUENTIALLY TO PART NUMBER...TOP OF LIST TO BOTTOM) | |
|---------------|----------------------------------------------------------------------------------------------------------------|---------------------------------------------|
| Remote ON/OFF | No Suffix | Positive Enable Logic |
| | N | Negative Logic |
| | 7 | 0.145 Pin Length (0.336" Total Height) |
| | 8 | 0.11 Pin Length (0.336" Total Height) |
| Through-Hole | No Suffix | |
| Surface-Mount | M6 | 0.336" (8.5mm) Max. Height 0.063" Clearance |

EXAMPLE: Q2S30ZA-NM6

NUCLEAR AND MEDICAL APPLICATIONS Power-One products are not authorized for use as critical components in life support systems, equipment used in hazardous environments, or nuclear control systems without the express written consent of the President of Power-One, Inc.

TECHNICAL REVISIONS The appearance of products, including safety agency certifications pictured on labels, may change depending on the date manufactured. Specifications are subject to change without notice.

Компания «Life Electronics» занимается поставками электронных компонентов импортного и отечественного производства от производителей и со складов крупных дистрибьюторов Европы, Америки и Азии.

С конца 2013 года компания активно расширяет линейку поставок компонентов по направлению коаксиальный кабель, кварцевые генераторы и конденсаторы (керамические, пленочные, электролитические), за счёт заключения дистрибьюторских договоров

Мы предлагаем:

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- Специальные условия для постоянных клиентов.
- Подбор аналогов.
- Поставку компонентов в любых объемах, удовлетворяющих вашим потребностям.
- Приемлемые сроки поставки, возможна ускоренная поставка.
- Доставку товара в любую точку России и стран СНГ.
- Комплексную поставку.
- Работу по проектам и поставку образцов.
- Формирование склада под заказчика.
- Сертификаты соответствия на поставляемую продукцию (по желанию клиента).
- Тестирование поставляемой продукции.
- Поставку компонентов, требующих военную и космическую приемку.
- Входной контроль качества.
- Наличие сертификата ISO.

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Конструкторский отдел помогает осуществить:

- Регистрацию проекта у производителя компонентов.
- Техническую поддержку проекта.
- Защиту от снятия компонента с производства.
- Оценку стоимости проекта по компонентам.
- Изготовление тестовой платы монтаж и пусконаладочные работы.



Тел: +7 (812) 336 43 04 (многоканальный)

Email: org@lifeelectronics.ru