

Preliminary Product Brief *

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Electronics

JHW/JHC 50W dual output series

Industry standard half brick DC/DC converter, 18Vdc-36Vdc (24V) and 36Vdc-75Vdc (48V) input voltage range, Dual output voltages available in combinations of 5.0V/3.3V, 3.3V/2.5V, 3.3V/1.8V, 2.5V/1.8V and 1.8V/1.5V



The JHW dual output –series from Tyco Electronics is a new generation of high efficiency dual output dc-dc converters designed for optimum flexibility utilizing flex load and wide output voltage adjustment trim. In addition, the JHW dual-series supports future migration of semiconductor and microprocessor supply voltages down to 0.8V.

Flex load (Power trading)

Device V_{o1} / V_{o2}	$I_{out\ max}$	$I_{out\ total}$
3.3V/2.5V, 3.3V/1.8V, 2.5V/1.8V and 1.8V/1.5V	$I_{o1}=12A$ $I_{o2}=12A$	16A
5.0V/3.3V	$I_{o1}=8A$ $I_{o2}=8A$	12A

Applications

- Distributed power architecture
- Wireless Networks
- Access and Optical Network Equipment
- Enterprise Networks
- Latest generation ICs (DSP, FPGA, ASIC) and Microprocessor powered applications

- **Flex load:**
Power trading between Vo1 and Vo2
- **Wide output voltage adjustment range:**
Vo2 adjustment range +10% / –55%
- **Ultra High Efficiency Dual Output:**
89% @ 5V/3.3V full load
- **Low output voltages down to 0.8V:**
supports migration to future IC and microprocessor supply voltages
- **Cost efficient open frame design**
- **SeqFET:** external sequencing FET drive supply (optional)
- **Surface mount version available**
- **Low profile 8.5mm (0.33") max**

Specification

- Independent tightly regulated outputs
- Monotonic start-up into pre-biased output
- Wide Output voltage adjustment trim:
+5% / -5% (Vo1) and +10% / -55% (Vo2)
- Load regulation $\pm 0.2\%$
- Line regulation $\pm 0.2\%$
- Sequencing: Synchronized rise and fall times
- Ripple and noise (5Hz to 20MHz bandwidth)
– RMS 35mV_{rms} ($\geq 3.3V$)
– Peak to peak 100mV_{pk-pk} ($\geq 3.3V$)
- Operating temperature range: -40°C to 90°C
- Designed to meet basic insulation

Protection

- Output overcurrent and overvoltage protection
- Over-temperature protection
- Input under voltage protection

Options

- Positive remote on/off logic
- Basic Insulation (-B)
- Surface Mount (-S)
- SeqFET

I) This product is intended for integration into end-use equipment. All the required procedures for CE marking of end-use equipment should be followed.
II) CSA is a registered trademark of Canadian Standards Association.
III) UL is a registered trademark of Underwriters Laboratories, Inc.
IV) VDE is a trademark of Verband Deutscher Elektrotechniker e.V.

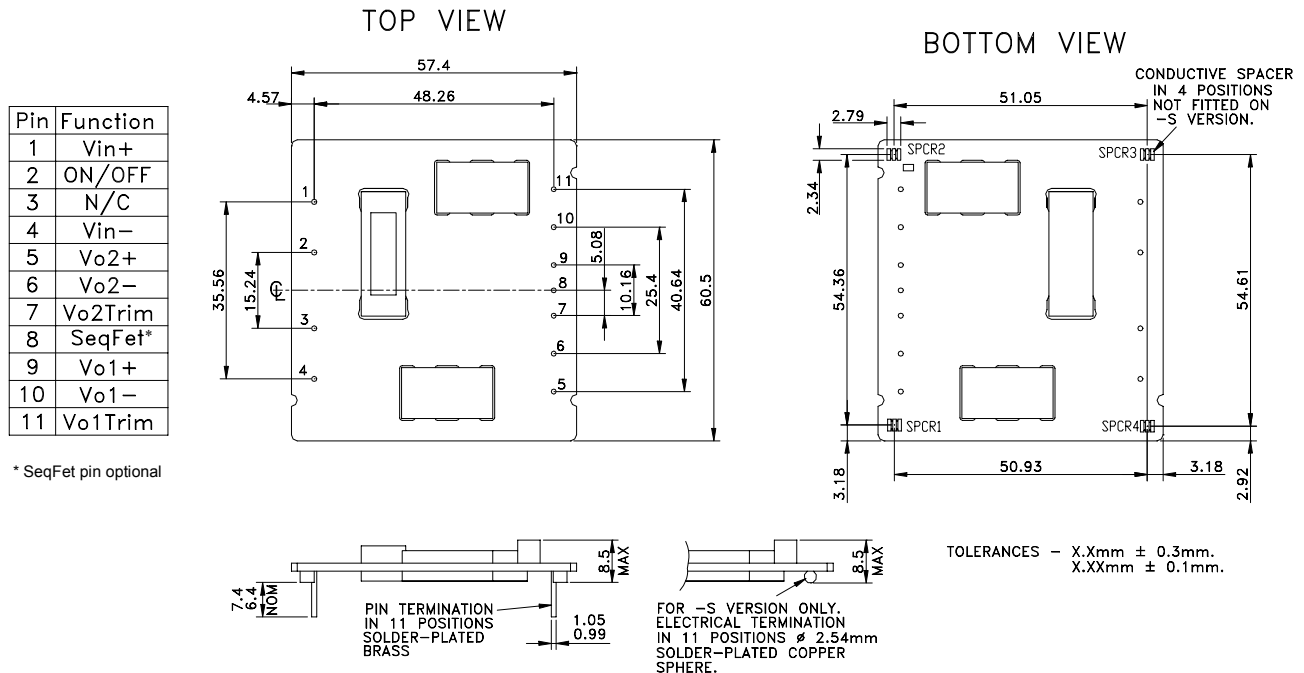
JHW/JHC 50W dual output series

Industry Standard Half Brick

Outline Drawing and Pin-out

Physical Dimensions and design

Industry standard, Half brick size with external dimensions of 57.4mm x 60.5mm x 8.5mm(2.26" x 2.38" x 0.33")
Weight 36.0g. The JHW series has a robust open frame construction able to withstand industry standard, through-hole and surface mount handling, soldering and cleaning processes.



Ordering Information

Please contact your Tyco Electronics sales representative for pricing, availability and optional features.

Product codes	Input Voltage	Output Voltage(s)	Output Current	Efficiency	Connector Type	Comcodes
JHW050AF1	48V (36-75Vdc)	5.0V & 3.3V (1.5V)	12A (combined O/P)	89%	Through Hole	108961566
JHW050FG1	48V (36-75Vdc)	3.3V & 2.5V (1.5V)	16A (combined O/P)	88%	Through Hole	108959354
JHW050FY1	48V (36-75Vdc)	3.3V & 1.8V (1.0V)	16A (combined O/P)	87%	Through Hole	108959362
JHW050GY1	48V (36-75Vdc)	2.5V & 1.8V (1.0V)	16A (combined O/P)	84%	Through Hole	108963968
JHW050YM1	48V (36-75Vdc)	1.8V & 1.5V (0.8V)	16A (combined O/P)	TBD	Through Hole	TBD

-1 Standard negative remote on/off logic



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