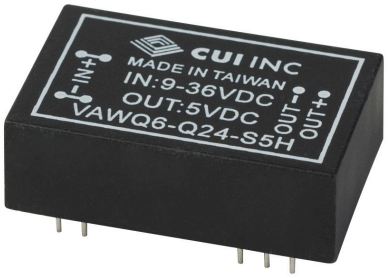
SERIES: VAWQ6 | DESCRIPTION: DC-DC CONVERTER

FEATURES

- up to 6 W isolated output
- wide input (4:1)
- industry standard 24 pin DIP package style
- single and dual regulated outputs
- 3,000 Vdc isolation
- short circuit protection
- wide temperature range -25 ~ 95°C with derating
- efficiency up to 80%



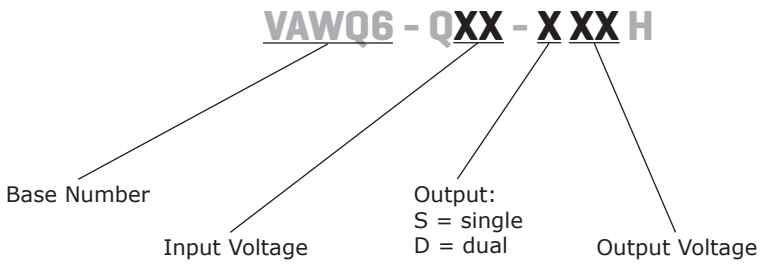
RoHS

MODEL

MODEL	input voltage typ (Vdc)	input voltage range (Vdc)	output voltage (Vdc)	output current max (mA)	output power max (W)	ripple and noise[1] max (mVp-p)	efficiency typ (%)
VAWQ6-Q24-S3R3H	24	9~36	3.3	1,000	3.3	100	72
VAWQ6-Q24-S5H	24	9~36	5	1,000	5	100	78
VAWQ6-Q24-S12H	24	9~36	12	470	5.64	120	80
VAWQ6-Q24-S15H	24	9~36	15	400	6	150	80
VAWQ6-Q24-D5H	24	9~36	±5	±500	5	100	78
VAWQ6-Q24-D12H	24	9~36	±12	±230	5.52	120	80
VAWQ6-Q24-D15H	24	9~36	±15	±190	5.7	150	80
VAWQ6-Q48-S3R3H	48	18~72	3.3	1,000	3.3	100	70
VAWQ6-Q48-S5H	48	18~72	5	1,000	5	100	78
VAWQ6-Q48-S12H	48	18~72	12	470	5.64	120	79
VAWQ6-Q48-S15H	48	18~72	15	400	6	150	80
VAWQ6-Q48-D5H	48	18~72	±5	±500	5	100	77
VAWQ6-Q48-D12H	48	18~72	±12	±230	5.52	120	79
VAWQ6-Q48-D15H	48	18~72	±15	±190	5.7	150	80

Notes: 1. ripple and noise are measured at 20 MHz BW with 10µF tantalum capacitor and 1µF ceramic capacitor across output

PART NUMBER KEY



Please read our datasheet & drawing disclaimer here.

INPUT

parameter	conditions/description	min	typ	max	units
operating input voltage	24 Vdc models 48 Vdc models	9 18	24 48	36 72	Vdc Vdc
input filter	PI type				

OUTPUT

parameter	conditions/description	min	typ	max	units
line regulation	measured from low line to high line			±0.5	%
load regulation	single output models[1] dual output models[2]			±0.5 ±1.0	% %
voltage accuracy				±2.0	%
voltage balance	dual output models			±1.0	%
switching frequency		200			kHz
temperature coefficient				±0.05	%/°C

Notes: 1. measured from 10% to 100% full load
2. measured from 25% to 100% full load

PROTECTIONS

parameter	conditions/description	min	typ	max	units
short circuit protection	continuous				

SAFETY AND COMPLIANCE

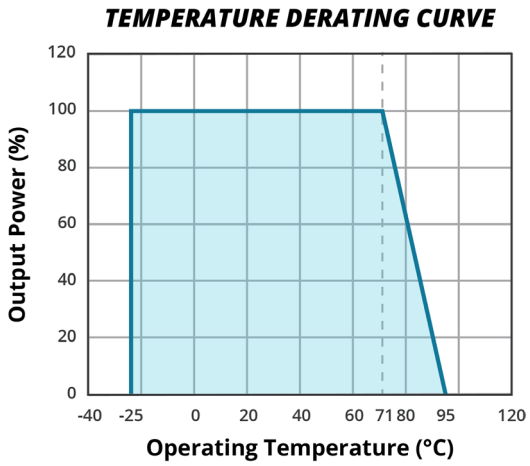
parameter	conditions/description	min	typ	max	units
isolation voltage		3,000			Vdc
insulation resistance		1,000			MΩ
RoHS	2011/65/EU				

ENVIRONMENTAL

parameter	conditions/description	min	typ	max	units
operating temperature	see derating curve	-25		95	°C
storage temperature		-40		100	°C

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DERATING CURVES



MECHANICAL

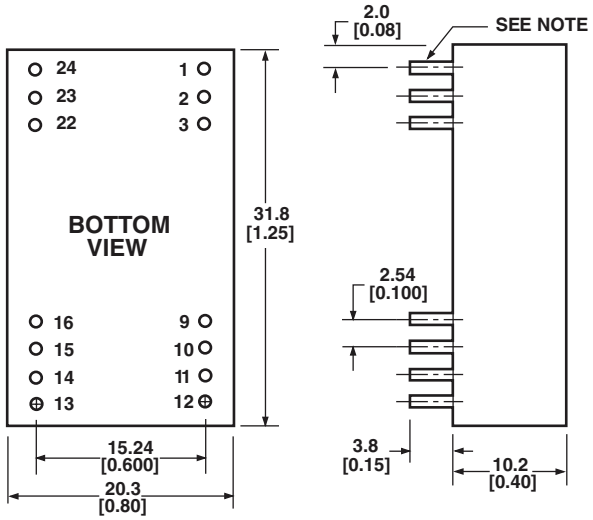
parameter	conditions/description	min	typ	max	units
dimensions	31.8 x 20.3 x 10.2 (1.25 x 0.80 x 0.40 inches)				mm
case material	non-conductive black plastic				
weight			12.5		g

MECHANICAL DRAWING

units: mm [inches]
tolerance: inches: x.xx = ±0.02, x.xxx = ±0.010
mm: x.xx = ±0.5, x.xxx = ±0.25
Note: pin diameter: 0.5 mm [0.02"]

PIN CONNECTIONS		
	SINGLE OUTPUT	DUAL OUTPUT
PIN	FUNCTION	FUNCTION
1,24	NP	NP
2,3	-Vin	-Vin
4,5	NP	NP
9	NC	Common
10,15	NC	NC
11	NC	-Vo
12,13	NP	NP
14	+Vo	+Vo
16	-Vo	Common
20,21	NP	NP
22,23	+Vin	+Vin

NP = No Pin
NC = No connection



Note: All specifications measured at 25°C, nominal input voltage, and full load unless otherwise noted.

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REVISION HISTORY

rev.	description	date
1.0	initial release	10/13/2008
1.01	updated information	04/09/2009
1.02	updated to new template	08/22/2011
1.03	V-Infinity branding removed	09/11/2011
1.04	updated spec	03/12/2013
1.05	updated spec	05/12/2015
1.06	company logo updated	02/16/2021
1.07	company address updated	11/05/2024
1.07	maximum temperature updated	11/20/2024

The revision history provided is for informational purposes only and is believed to be accurate.

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CUI offers a two (2) year limited warranty. Complete warranty information is listed on our website.

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