

## 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 (-25~71°C)
- efficiency up to 80%

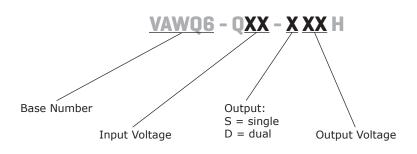


MODEL		put tage	output voltage			ripple and noise <sup>1</sup>		
	<b>typ</b> (Vdc)	range (Vdc)	(Vdc)	<b>max</b> (mA)	max (W)	<b>max</b> (mVp-p)	<b>typ</b> (%)	
VAWQ6-Q24-S3R3H	24	9~36	3.3	1,000	3.3	100	72	
VAWQ6-Q24-S5H	24	9~36	5	1,000	5	100	78	
VAWQ6-Q24-S12H	24	9~36	12	470	5.64	120	80	
VAWQ6-Q24-S15H	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**

.....



## 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 <sup>1</sup> dual output models <sup>2</sup>			±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 2. measured from 25% to					

## **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				

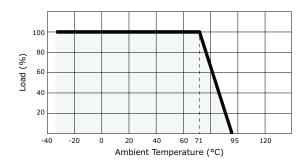
## **ENVIRONMENTAL**

.....

parameter	conditions/description	min	typ	max	units
operating temperature		-25		71	°C
case temperature				95	°C
storage temperature		-40		100	°C

.....

#### **DERATING CURVES**



#### **MECHANICAL**

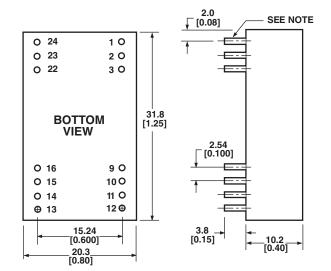
parameter	conditions/description	min	typ	max	units
dimensions	31.8 x 20.3 x 10.2 (1.25 x 0.80 x 0.40 inches)				mm
case material	non-conductive black plastic				
weight			12.5		g

## **MECHANICAL DRAWING**

units: mm [inches]

tolerance: inches:  $x.xx = \pm 0.02$ ,  $x.xxx = \pm 0.010$ mm:  $x.xx = \pm 0.5$ ,  $x.xxx = \pm 0.25$ 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.

## **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

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



Headquarters 20050 SW 112th Ave. Tualatin, OR 97062 800.275.4899

Fax 503.612.2383 cui.com techsupport@cui.com

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

.....

CUI reserves the right to make changes to the product at any time without notice. Information provided by CUI is believed to be accurate and reliable. However, no responsibility is assumed by CUI for its use, nor for any infringements of patents or other rights of third parties which may result from its use.

CUI products are not authorized or warranted for use as critical components in equipment that requires an extremely high level of reliability. A critical component is any component of a life support device or system whose failure to perform can be reasonably expected to cause the failure of the life support device or system, or to affect its safety or effectiveness.

# **X-ON Electronics**

Largest Supplier of Electrical and Electronic Components

Click to view similar products for Isolated DC/DC Converters category:

Click to view products by CUI Inc manufacturer:

Other Similar products are found below :

ESM6D044440C05AAQ FMD15.24G PSL486-7LR PSR152.5-7IR Q48T30020-NBB0 AVO240-48S12B-6L AVO250-48S28B-6L NAN-0505 HW-L16D JAHW100Y1 217-1617-001 22827 SPB05C-12 SQ24S15033-PS0S 18952 19-130041 CE-1003 CE-1004 GQ2541-7R PSE1000DCDC-12V RDS180245 MAU228 419-2065-201 449-2075-101 TME 0303S TME 0505S TME 1205S TME 1212S TME 2405S TME 2412S V300C24C150BG 419-2062-200 419-2063-401 419-2067-101 419-2067-501 419-2068-001 DCG40-5G DFC15U48D15 449-2067-000 XGS-0512 XGS-1212 XGS-2412 XGS-2415 XKS-1215 033456 NCT1000N040R050B SPB05B-15 SPB05C-15 TME 0509S