

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 V isolation (H version)
- short circuit protection
- wide temperature (-25~71°C)
- efficiency up to 80%

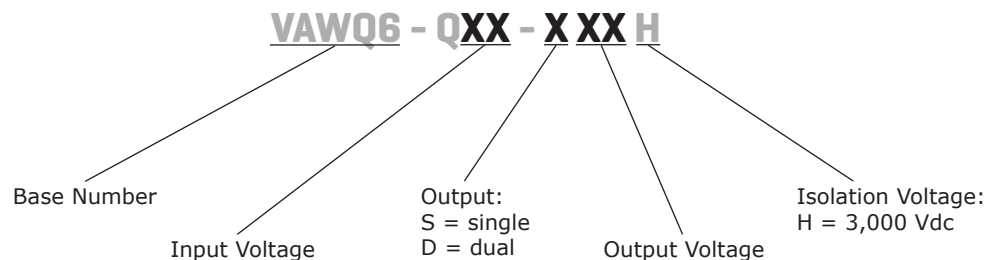


MODEL

MODEL	input voltage		output voltage (Vdc)	output current max (mA)	output power max (W)	ripple and noise ¹ max (mVp-p)	efficiency typ (%)
	typ (Vdc)	range (Vdc)					
VAWQ6-Q24-S3R3	24	9~36	3.3	1,000	3.3	100	72
VAWQ6-Q24-S5	24	9~36	5	1,000	5	100	78
VAWQ6-Q24-S12	24	9~36	12	470	5.64	120	80
VAWQ6-Q24-S15	24	9~36	15	400	6	150	80
VAWQ6-Q24-D5	24	9~36	±5	±500	5	100	78
VAWQ6-Q24-D12	24	9~36	±12	±230	5.52	120	80
VAWQ6-Q24-D15	24	9~36	±15	±190	5.7	150	80
VAWQ6-Q48-S3R3	48	18~72	3.3	1,000	3.3	100	70
VAWQ6-Q48-S5	48	18~72	5	1,000	5	100	78
VAWQ6-Q48-S12	48	18~72	12	470	5.64	120	79
VAWQ6-Q48-S15	48	18~72	15	400	6	150	80
VAWQ6-Q48-D5	48	18~72	±5	±500	5	100	77
VAWQ6-Q48-D12	48	18~72	±12	±230	5.52	120	79
VAWQ6-Q48-D15	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	12 V model	9	24	36	Vdc
	24 V model	18	48	72	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			±0.5	%
	dual output models ²			±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

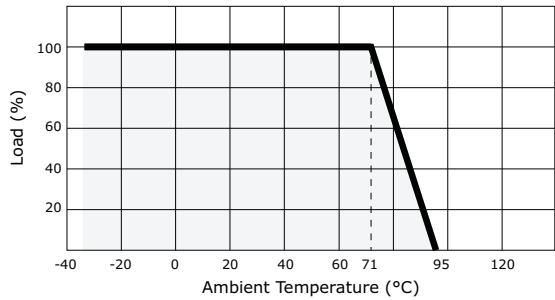
parameter	conditions/description	min	typ	max	units
isolation voltage		3,000			Vdc
insulation resistance		1,000			MΩ
RoHS compliant	yes				

ENVIRONMENTAL

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

Note: all specifications are typical measured at nominal line, full load, and 25°C unless otherwise noted

DERATING CURVES

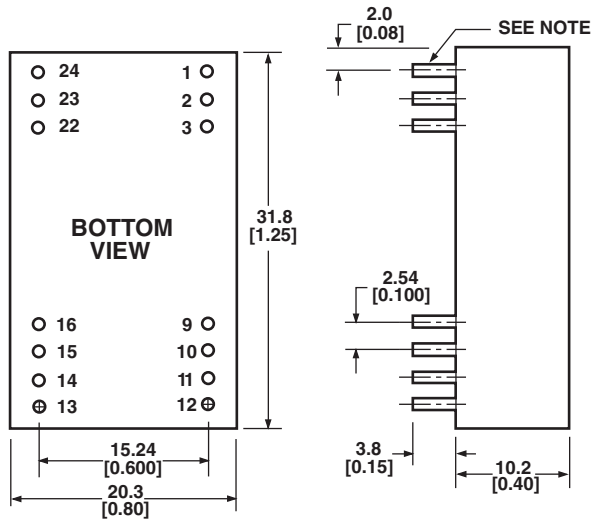


MECHANICAL

parameter	conditions/description	min	typ	max	units
dimensions	1.25 x 0.80 x 0.40 (31.8 x 20.3 x 10.2 mm)				inch
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 0.02 inch (0.5 mm)



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

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

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.