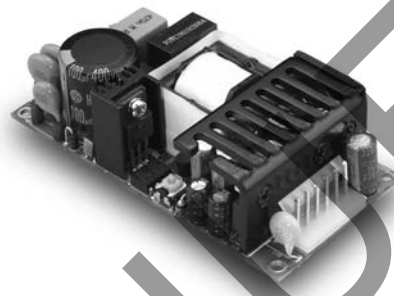


SERIES: VFM40 | **DESCRIPTION:** AC-DC POWER SUPPLY

FEATURES

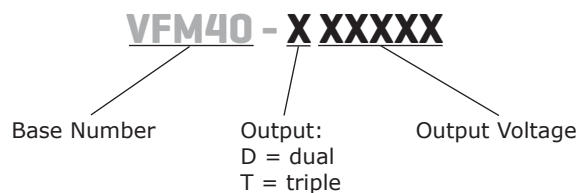
- up to 40 W continuous power
- industry standard footprint (2x4")
- universal input (90~264 Vac)
- 4,242 V isolation
- over current, over temperature, over voltage, and short circuit protections
- efficiency up to 81%



MODEL	output voltage (Vdc)	output current			output power max (W)	ripple and noise ¹ max (mVp-p)	efficiency typ (%)
		min (A)	typ (A)	max (A)			
VFM40-D512	5 (V1) 12 (V2)	0.4 0.2	3.2 2.0	5.0 2.5	40.0	50 120	80
VFM40-D524	5 (V1) 24 (V2)	0.4 0.2	3.2 1.0	5.0 1.5	40.0	50 240	81
VFM40-T5125	5 (V1) 12 (V2)	0.4 0.2	3.0 2.0	5.0 2.5	40.5	50 120	78
	-5 (V3)	0	0.3	0.5		50	
VFM40-T512	5 (V1)	0.4	3.0	5.0	42.6	50	78
	12 (V2)	0.2	2.0	2.5		120	
	-12 (V3)	0	0.3	0.5		120	
VFM40-T515	5 (V1)	0.4	3.0	5.0	42.0	50	78
	15 (V2)	0.2	1.5	2.3		150	
	-15 (V3)	0	0.3	0.5		150	
VFM40-T52412	5 (V1)	0.4	3.0	5.0	42.6	50	78
	24 (V2)	0.2	1.0	1.5		240	
	-12 (V3)	0	0.3	0.5		120	
VFM40-T5245	5 (V1)	0.4	3.0	5.0	40.5	50	78
	24 (V2)	0.2	1.0	1.5		240	
	-5 (V3)	0	0.3	0.5		50	
VFM40-T52412-1	5 (V1)	0.4	3.0	5.0	42.6	50	78
	24 (V2)	0.2	1.0	1.5		240	
	12 (V3)	0	0.3	0.5		120	
VFM40-3512	3.3 (V1)	0.4	5.0	7.0	30.0	100	71
	5 (V2)	0.2	2.0	3.5		100	
	12 (V3)	0	0.3	0.5		120	

Notes: 1. Ripple & noise are measured at 20 MHz BW with 0.1 μ F ceramic cap and a 10 μ F electrolytic capacitors on the output

PART NUMBER KEY



INPUT

parameter	conditions/description	min	typ	max	units
voltage		90		264	Vac
		120		370	Vdc
frequency		47		440	Hz
input current	115 Vac			1	A
inrush current	230 Vac			60	mA

OUTPUT

parameter	conditions/description	min	typ	max	units
line regulation	dual output models V1			±1	%
	V2			±2	%
	triple output models V1			±1	%
	V2			±2	%
load regulation	V3			±1	%
	dual output models V1			±3	%
	V2			±5	%
	triple output models V1			±3	%
voltage accuracy	V2			±5	%
	V3			±1	%
	dual output models V1			±3	%
	V2			±4	%
hold-up time	triple output models V1			±3	%
	V2			±4	%
	V3			±3	%
hold-up time	115 Vac at full load		20		ms
adjustment range			10		%

PROTECTIONS

parameter	conditions/description	min	typ	max	units
over voltage protection	V1 3.3 V	3.6	4.6		Vdc
	5 V	5.7	6.7		Vdc
over current protection	V2 12, 15, and 24 V	120		140	%
short circuit protection	auto recovery			180	%Io
	auto recovery upon removal of short				

SAFETY & COMPLIANCE

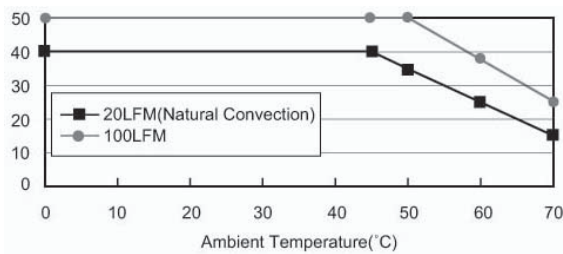
parameter	conditions/description	min	typ	max	units
isolation voltage	primary to secondary	4,242			Vac
safety standards	UL, TUV, CE				
EMI/EMC	EN 61204-3 Class B, CISPR, FCC Class B				
leakage current				3.5	mA
RoHS compliant	yes				

ENVIRONMENTAL

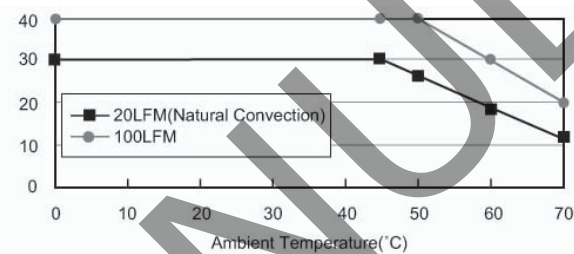
parameter	conditions/description	min	typ	max	units
operating temperature	see derating curve	0		45	°C
storage temperature		-20		85	°C

DERATING CURVES

All other models



VFM40-3512



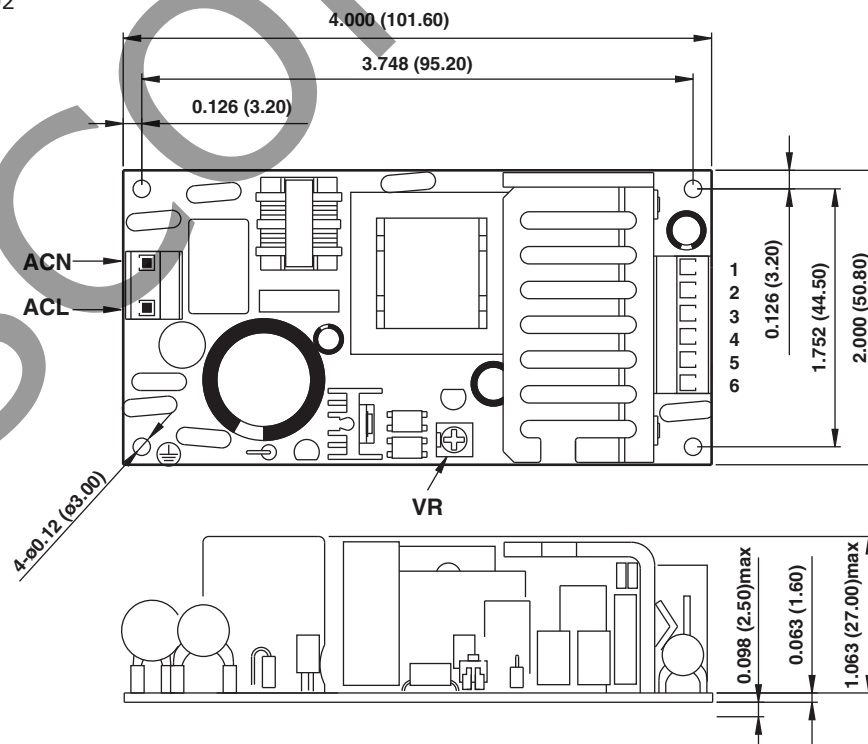
MECHANICAL

parameter	conditions/description	min	typ	max	units
dimensions	4 x 2 x 1.2 (101.6 x 50.8 x 30.48 mm)				inch
weight			180		g

MECHANICAL DRAWING

units: inches (mm)
 tolerance: inches: x.xx = ±0.02
 mm: x.xx = ±0.5

MATING CONNECTORS	
CONNECTOR	MOLEX
AC input (CN1)	housing: 09-50-3031 crimp contact: 2878
DC output (CN2)	housing: 09-50-3061 crimp contact: 2878



PIN CONNECTIONS	
PIN	FUNCTION
1	V2
2	V1
3	V1
4	COM
5	COM
6	V3

Note: All specifications measured at 25°C, 115/230Vac input voltage, and 75% load unless otherwise noted.

REVISION HISTORY

rev.	description	date
1.0	initial release	01/30/2007
1.01	updated spec template and derating curves	08/28/2007
1.03	new template applied, V-Infinity branding removed, safety marks/standards and mechanical drawing updated	08/17/2012
1.04	updated spec	07/22/2013

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

**CUI INC®**

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.