

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

FEATURES

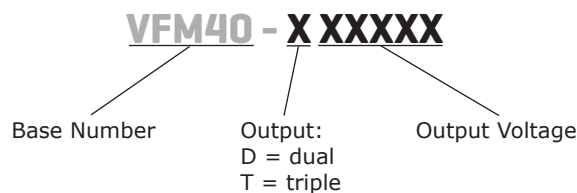
- up to 40 W continuous power
- industry standard footprint (2x4")
- universal input (90~264 Vac)
- 4,242 V isolation
- over current, over temperature, over voltage, and short circuit protections
- efficiency up to 81%



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)	0.4	3.0	5.0	40.5	50	78
	12 (V2)	0.2	2.0	2.5		120	
	-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	%
		V3			±1	%
load regulation	dual output models	V1			±3	%
		V2			±5	%
	triple output models	V1			±3	%
		V2			±5	%
		V3			±1	%
voltage accuracy	dual output models	V1			±3	%
		V2			±4	%
	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
	V2	12, 15, and 24 V	120		140	%
over current protection	auto recovery				180	%Io
short circuit protection	auto recovery upon removal of short					

SAFETY & COMPLIANCE

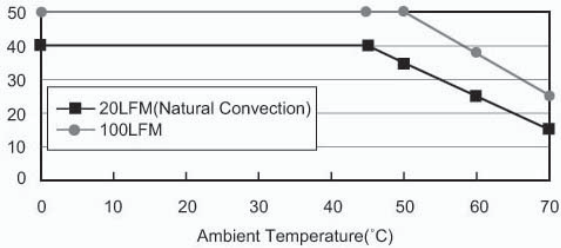
parameter	conditions/description	min	typ	max	units
isolation voltage	primary to secondary	4,242			Vac
safety standards	UL, TUV, CE				
EMI/EMC	EN 61204-3 Class B, CISPR, FCC Class B				
leakage current				3.5	mA
RoHS compliant	yes				

ENVIRONMENTAL

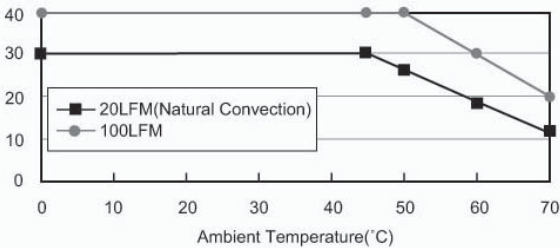
parameter	conditions/description	min	typ	max	units
operating temperature	see derating curve	0		45	°C
storage temperature		-20		85	°C

DERATING CURVES

All other models



VFM40-3512



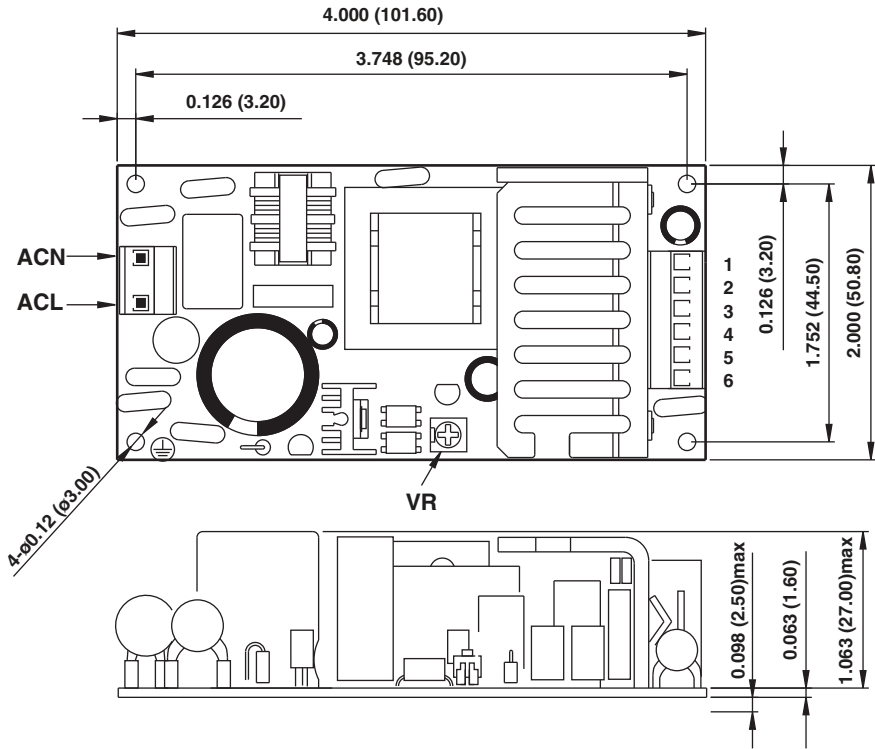
MECHANICAL

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

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

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



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