SERIES: VOF-80 | DESCRIPTION: AC-DC POWER SUPPLY

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FEATURES

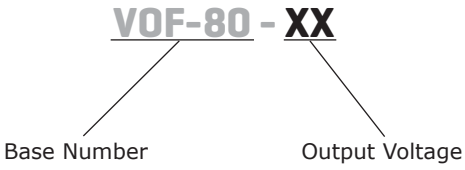
- up to 80 W continuous power
- <0.5W no load power consumption
- industry standard footprint
- universal input (85-264 Vac)
- single output from 3.3 to 48V
- user trimmable output voltage
- 3000V isolation
- over current, over voltage, and short circuit protections
- UL/cUL and TUV 60950-1 safety approvals
- efficiency up to 89%



MODEL	output voltage (Vdc)	output current max (A)	output power max (W)	ripple[1] and noise max (mVp-p)	efficiency typ (%)
VOF-80-3.3	3.3	10	33	120	75
VOF-80-5	5	10	50	120	76
VOF-80-12	12	6.66	80	120	85
VOF-80-15	15	5.33	80	150	86
VOF-80-24	24	3.33	80	240	87
VOF-80-48	48	1.66	80	480	89

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

PART NUMBER KEY



Please read our datasheet & drawing disclaimer here.

INPUT

parameter	conditions/description	min	typ	max	units
voltage		85 120		264 375	Vac Vdc
frequency		47		63	Hz
input current	110 Vac 220 Vac		1.5 0.8		A A
inrush current	115 Vac, full load, cold start 220 Vac, full load, cold start			25 50	A A
input fuse	built-in, non-user serviceable				

OUTPUT

parameter	conditions/description	min	typ	max	units
line regulation	high line to low line at full load		±0.5		%
load regulation	full load to 10% load		±1		%
temperature coefficient			±0.05		%/°C
hold-up time	115 Vac at full load	8			ms
adjustability	adjustable with built-in trim pot	-10		+5	%
switching frequency			65		kHz

PROTECTIONS

parameter	conditions/description	min	typ	max	units
over voltage protection	clamped by TVS 3.3 and 5 V models all other models			6.8 135	V %
over current protection	automatically recovers		105		%Io
short circuit protection	continuous, long term short circuit may reduce reliability				

SAFETY & COMPLIANCE

parameter	conditions/description	min	typ	max	units
isolation voltage	primary to secondary for 1 minute primary to transformer core for 1 minute primary to ground for 1 minute	3,000 1,500 1,500			Vac Vac Vac
isolation resistance	input to output at 500 Vdc @ 25°C	50			MΩ
safety approvals	TUV EN60950, CE, UL/cUL 60950-1				
EMI/EMC	FCC class B, EN55022 class B				
leakage current				1.5	mA
RoHS compliant	yes				
MTBF	according to MIL-HDBK-217F	250,000			hours

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ENVIRONMENTAL

parameter	conditions/description	min	typ	max	units
operating temperature	see derating curve	0		60	°C
storage temperature		-20		85	°C
operating humidity	non-condensing	20		90	%
storage humidity	non-condensing	20		95	%
operating altitude			10,000 3,000		ft m
storage altitude			30,000 9,000		ft m

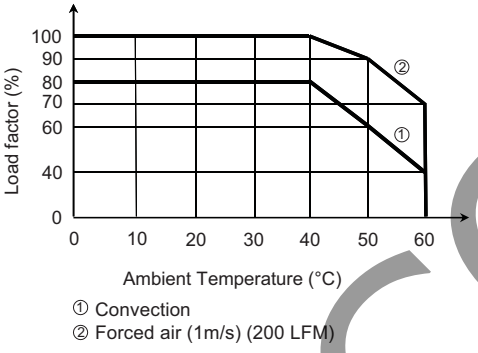
MECHANICAL

parameter	conditions/description	min	typ	max	units
dimensions	4 x 2 x 1.40 (102 x 51 x 35.6 mm)				inch
weight			0.2		kg
cooling method	free air convection or forced air (see derating curves below)				

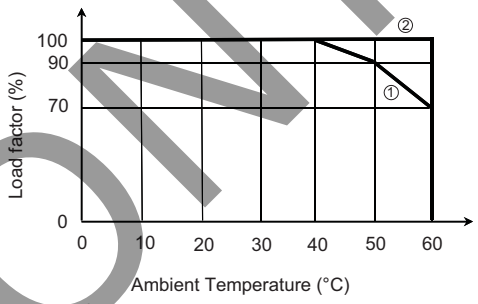
DERATING CURVES

1. output power vs. ambient temperature

a. 3.3, 5 V models

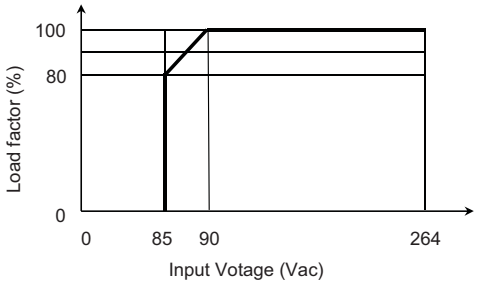


b. all other models



2. output power vs. input voltage

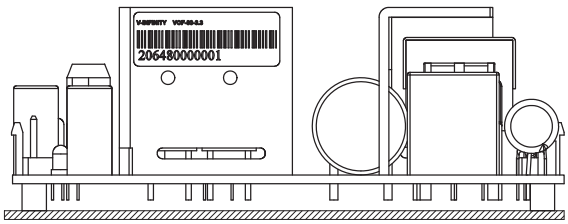
all models



MATING CONNECTORS

parameter	conditions/description
ac input (CN1)	mates with Molex housing 09-50-7031 with Molex 2878 series crimp contact
dc output (CN2)	mates with Molex housing 09-50-7061 with Molex 2878 series crimp contact

MOUNTING METHOD



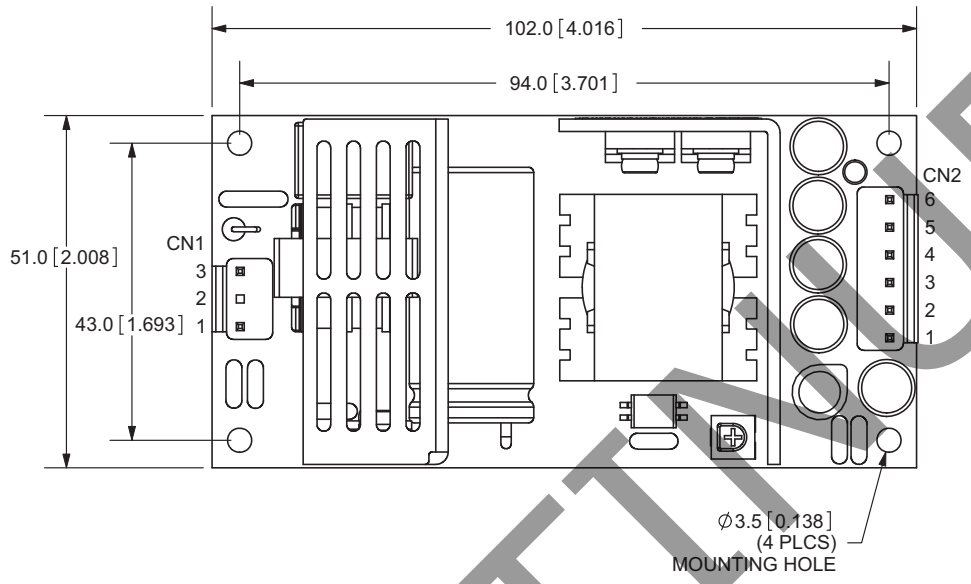
Horizontal

(performace evaluations conducted under this mounting method)

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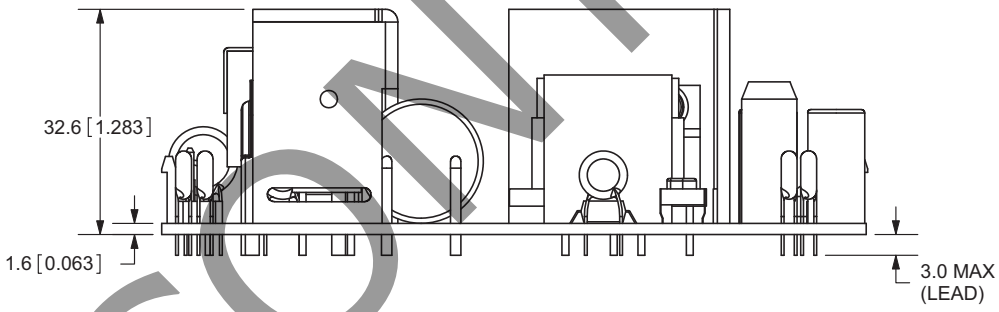
MECHANICAL DRAWING

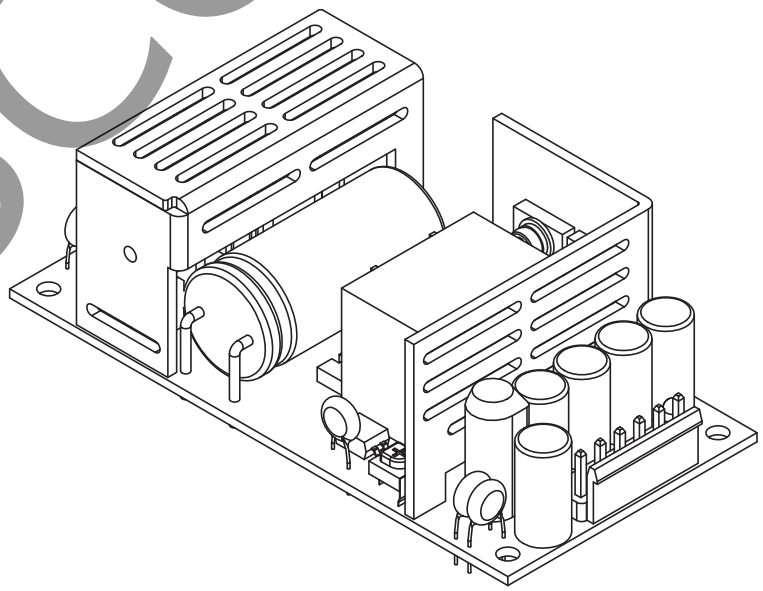
tolerance:
±1.0mm unless otherwise specified



CN1	
1	L
2	no pin
3	N

CN2	
1	+Vo
2	+Vo
3	+Vo
4	-Vo
5	-Vo
6	-Vo





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REVISION HISTORY

rev.	description	date
1.0	initial release	03/13/2009
1.01	updated pin designation	04/01/2010
1.02	updated derating curves and mechanical drawing and applied new spec template	05/02/2011
1.03	V-Infinity branding removed	08/16/2012

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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