CUI INC®

SERIES: VOF-6 | DESCRIPTION: AC-DC POWER SUPPLY

FEATURES

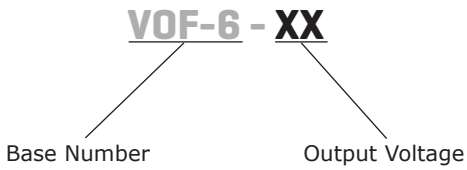
- up to 6 W continuous power
- compact size
- universal input (85~264 Vac / 120~375 Vdc)
- single output from 3.3~24 V
- no minimum load required
- 3000 V isolation
- over current, over voltage, and short circuit protections
- UL/cUL and TUV 60950-1 safety approvals
- no load power consumption < 0.5 W
- efficiency up to 80%



MODEL	output voltage (Vdc)	output current max (A)	output power max (W)	ripple[1] and noise max (mVp-p)	efficiency typ (%)
VOF-6-3.3	3.3	1.20	3.96	100	69
VOF-6-5	5	1.20	6	100	73
VOF-6-12	12	0.50	6	120	77
VOF-6-15	15	0.40	6	150	78
VOF-6-24	24	0.25	6	240	80

Notes: 1. Ripple & noise are measured at 20 MHz BW with 47 µF ceramic and 100 nF electrolytic capacitors on the output

PART NUMBER KEY



INPUT

parameter	conditions/description	min	typ	max	units
voltage		85 120		264 375	Vac Vdc
frequency		47		63	Hz
current				0.6	A
inrush current	at 110 Vac, full load, cold start at 220 Vac, full load, cold start			10 20	A A
input fuse	built-in, non-user serviceable				

OUTPUT

parameter	conditions/description	min	typ	max	units
line regulation	3.3 V model all other models			±0.6 ±0.5	% %
load regulation	3.3 V model all other models			±1.2 ±1	% %
temperature coefficient			±0.05		%/°C
hold-up time	115 Vac at full load		6		ms
adjustability	adjustable with built-in trim pot	-5		+5	%
switching frequency			67		kHz
no load power consumption				0.5	W

PROTECTIONS

parameter	conditions/description	min	typ	max	units
over voltage protection	clamped by TVS				
over current protection	automatically recovers		105		%
short circuit protection	protected, long term short circuit may reduce reliability				

SAFETY & COMPLIANCE

parameter	conditions/description	min	typ	max	units
isolation voltage	input to output at 10 mA for 1 minute			3,000	Vac
isolation resistance	input to output at 500 Vdc at 25°C	50			MΩ
safety approvals	TUV EN 60950, UL/cUL 60950-1				
EMI/EMC	FCC class B, EN55022 class B, CE				
leakage current				0.25	mA
RoHS compliant	yes				
MTBF	according to MIL-HDBK-217F	250,000			hours

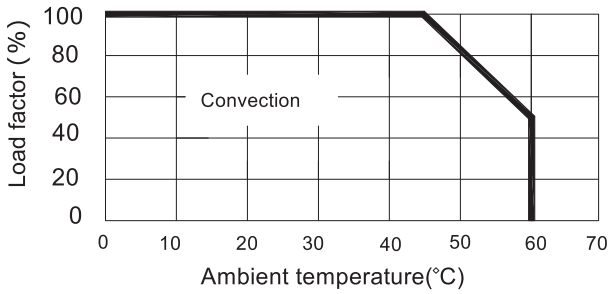
ENVIRONMENTAL

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		90	%

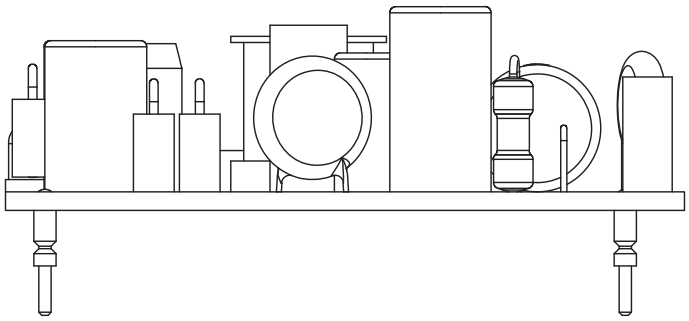
MECHANICAL

parameter	conditions/description	min	typ	max	units
dimensions	2.17 x 1.38 x 0.65 (55.4 x 35 x 16 mm)				inch
cooling method	free air convection (see derating curve below)				

DERATING CURVES



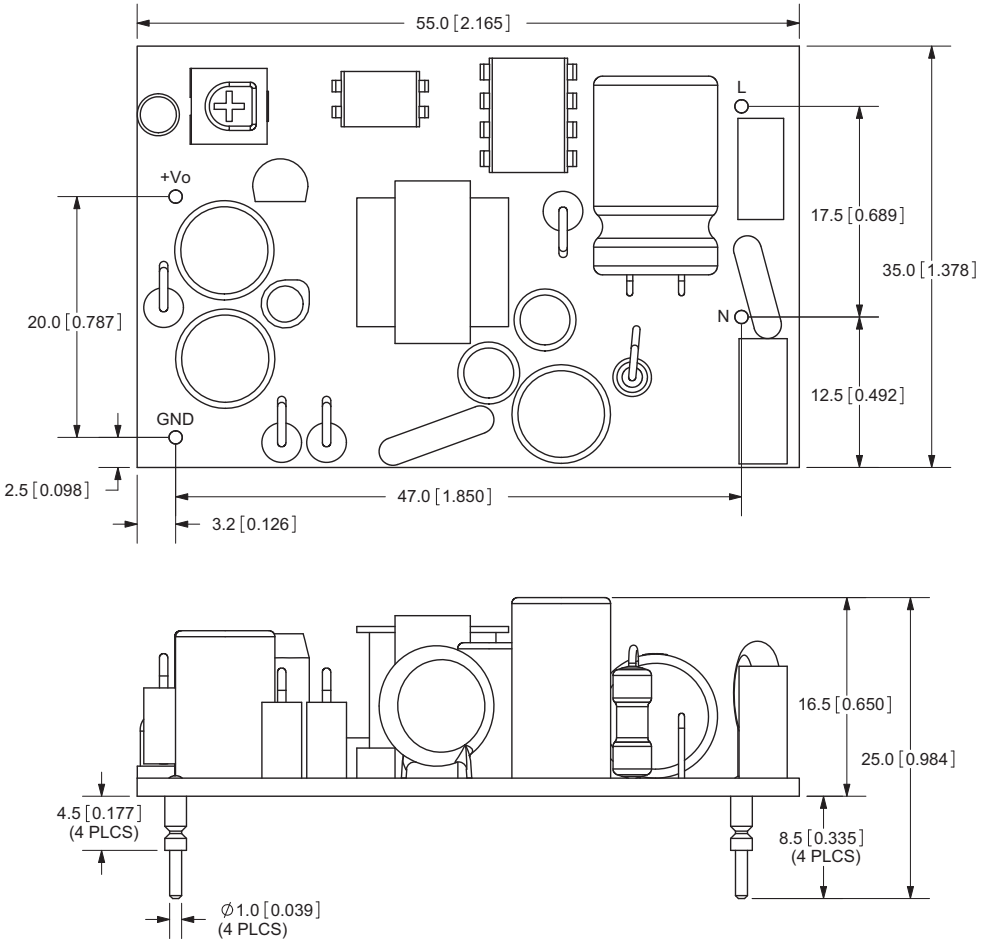
MOUNTING METHOD

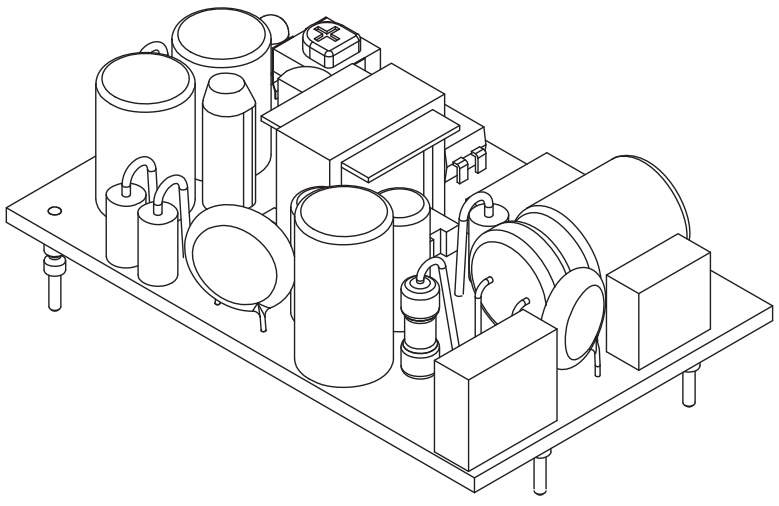


Horizontal
(performance evaluations conducted under this mounting method)

MECHANICAL DRAWING

units: mm [inches]
tolerance: ±0.3 [±0.01]





REVISION HISTORY

rev.	description	date
1.0	initial release	10/19/2010
1.01	new template applied	05/13/2011
1.02	added MTBF data	09/20/2011
1.03	V-Infinity branding removed	09/06/2012

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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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.