SERIES: VOF-10 | **DESCRIPTION:** AC-DC POWER SUPPLY

FEATURES

- Up to 10 W continuous power
- Compact size
- Universal input (85~264 Vac / 120~375 Vdc)
- Single output from 3.3~48 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 78%

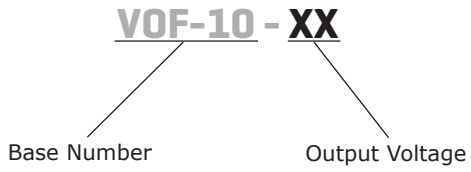


V-Infinity

MODEL	output voltage (Vdc)	output current max (A)	output power max (W)	ripple[1] and noise max (mVp-p)	efficiency typ (%)
VOF-10-3.3	3.3	2.4	8	100	70
VOF-10-5	5	2.0	10	100	75
VOF-10-9	9	1.11	10	120	75
VOF-10-12	12	0.83	10	120	75
VOF-10-15	15	0.67	10	150	75
VOF-10-24	24	0.42	10	240	78
VOF-10-48	48	0.21	10	480	78

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
input current				0.6	A
inrush current	110 Vac, full load, cold start 220 Vac, full load, cold start			15 30	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		16		ms
adjustability	adjustable with built-in trim pot	-5		5	%
switching frequency			100		kHz
no load power consumption	all other models 48 V model			0.5 0.7	W 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	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 EN60950, 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

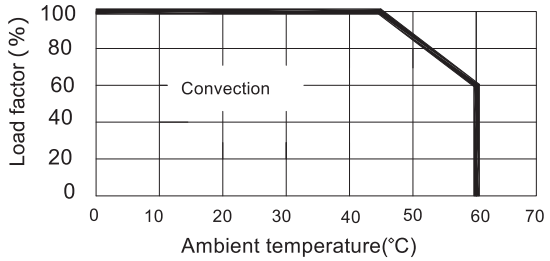
ENVIRONMENTAL

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	%

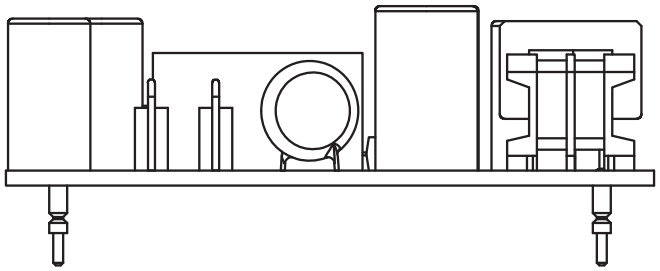
MECHANICAL

parameter	conditions/description	min	typ	max	units
dimensions	2.56 x 1.77 x 1.04 (65 x 45 x 26.5 mm)				inch
cooling method	free air convection (see derating curve below)				

DERATING CURVES



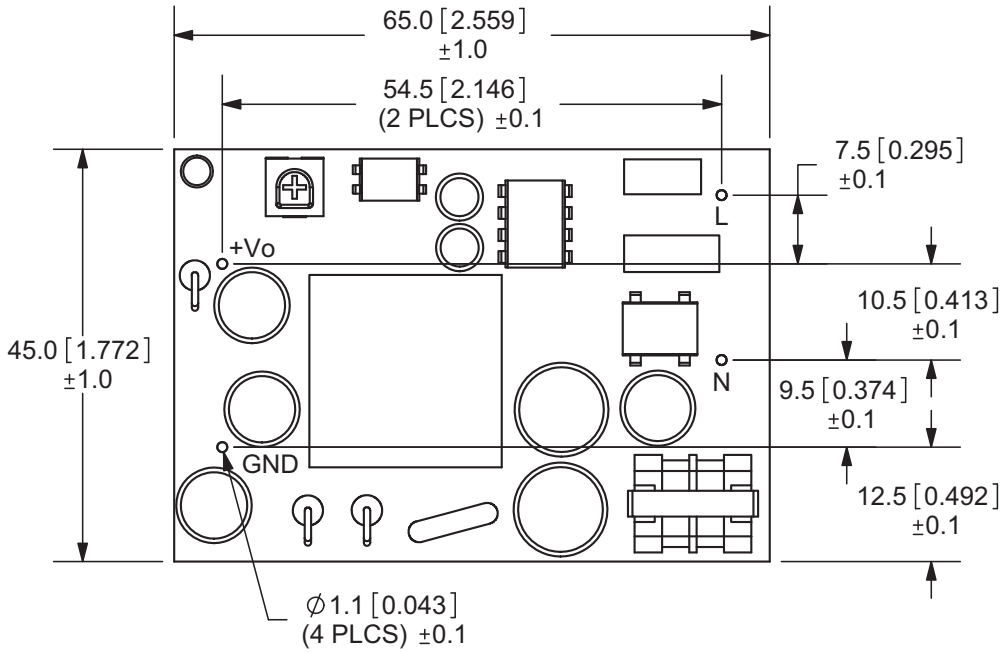
MOUNTING METHOD



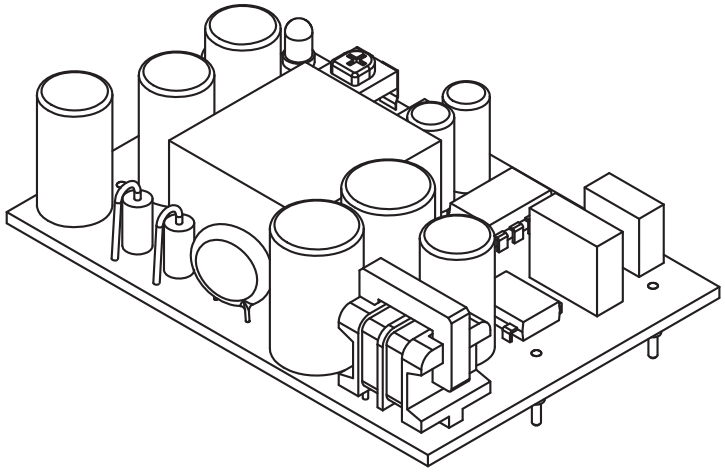
Horizontal
(performance evaluations conducted under this mounting method)

MECHANICAL DRAWING

tolerance:
±0.3mm unless otherwise specified







REVISION HISTORY

rev.	description	date
1.0	initial release	03/18/2010
1.01	applied new spec template	05/13/2011
1.02	added MTBF data	09/20/2011

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

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