V-INFINITY
a division of CUI INC

date 04/2010

SERIES: FSC-S15

DESCRIPTION: ac-dc converter

features
- UL, C-UL, CB, CE marking
- encapsulated compact case
- high efficiency
- universal input
- surface mounting technology
- built in EMI filter
- inrush current limit
- 67kHz fixed frequency
- fixed output voltage
- thermal shutdown
- short circuit protection
- low output ripple and noise
- isolated output
- 2 year warranty



RoHS

Discontinued

model number	input voltage	output voltage	power max.	ripple & noise max.	efficiency (%)
FSC-S15-3R3U	AC 85-264V / DC 110-340V	3.3V @ 3.0A	9.9 W	80 mVp-p	75
FSC-S15-5U	AC 85-264V / DC 110-340V	5V @ 3.0A	15.0 W	80 mVp-p	75
FSC-S15-12U	AC 85-264V / DC 110-340V	12V @ 1.3A	15.6 W	120 mVp-p	78
FSC-S15-15U	AC 85-264V / DC 110-340V	15V @ 1.0A	15.0 W	150 mVp-p	78
FSC-S15-24U	AC 85-264V / DC 110-340V	24V @ 0.65A	15.6 W	200 mVp-p	78

INPUT

parameter	conditions/description	min	nom	max	units
input frequency		47	(50~60)	440	Hz
input voltage		85		264	VAC
		110		340	VDC
input current	AC input of 110 VAC			0.31	A
	AC input of 220 VAC			0.16	A
inrush current	measured at 110 VAC at full load, cold start			30	A
	measured at 220 VAC at full load, cold start			60	A
leakage current	measured at 110 VAC			0.5	mA
	measured at 220 VAC			0.75	mA

OUTPUT

parameter	conditions/description	min	nom	max	units
voltage tolerance		-2%		+2%	
ripple and noise		-1%		+1%	
line regulation		-1%		+1%	
load regulation		-1%		+1%	
dynamic load regulation		-3%		+3%	
temperature drift		-1%		+1%	
rise time				400	ms
hold-up time		10			ms

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PROTECTION CIRCUIT

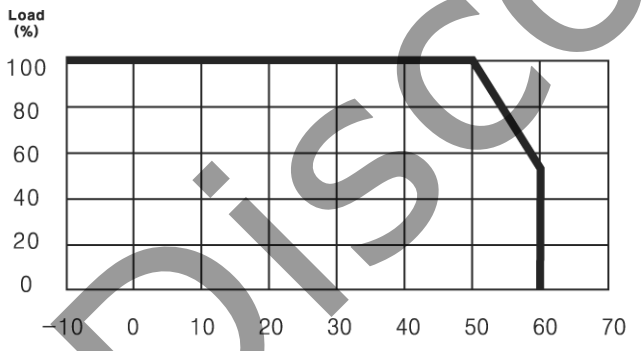
parameter	conditions/description
output over current	works at over 105% of the rating and recovers automatically.
over temperature	145 ºC

GENERAL

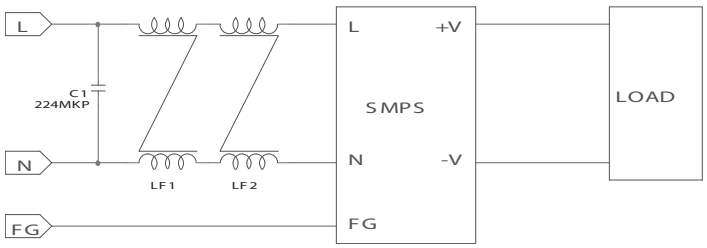
parameter	conditions/description	min	nom	max	units
operating temp.		-10		60	ºC
storage temp.		-20		70	ºC
operating humid.	non-condensing	20%		90%	RH
storage humid.	non-condensing	20%		90%	RH
isolation voltage (HI-POT)	applied for 1 minute, 10mA primary to secondary, 500 Vdc @ 100 MΩ	3000			VAC
vibration	at 10G 3 minute period	10		55	Hz
impact	50G for 11mS, once on each X, Y, Z axis				
MTBF	3.5 x 10^5				hours
RoHS	yes				
safety	approved to UL60950(E222889), CSA C22.2 NO.60950, CB(IEC 60950), CE(EN60950)				
EMC[1]	5W, 10W single output: approved; EN61204-3 class B, EN 61000-3-3, EN 61000-3-2 (through TUV)				
warranty	standard warranty length			2	years

NOTE: 1. to meet the standard of EN61204-3 class B, use the external noise filter between L and N

DERATING CURVE



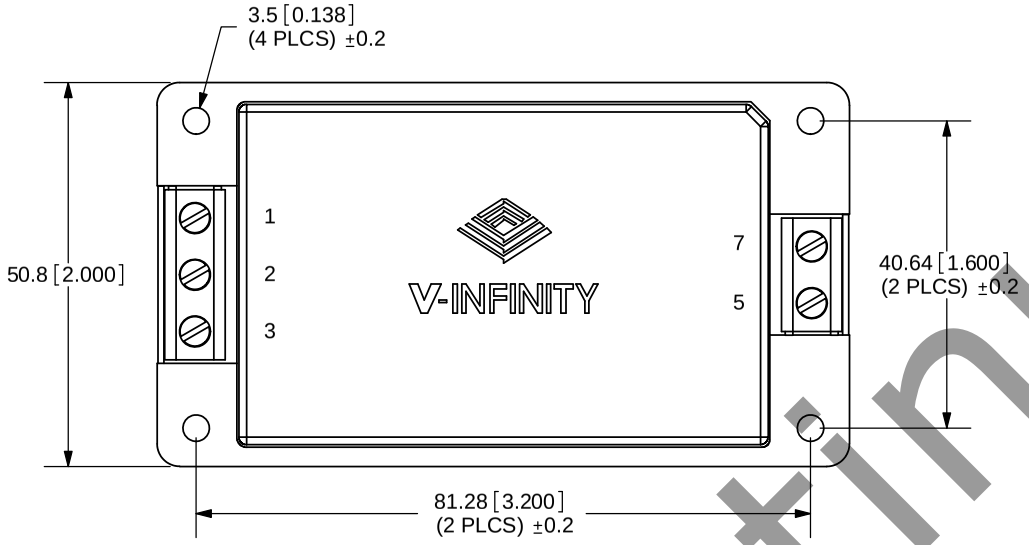
EXTERNAL EMI FILTER

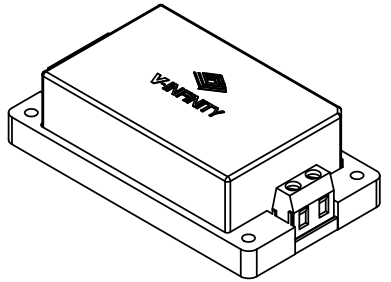


C1 = 220nF / 275Vac, X2 Capacitor
LF1 = 20mH Common Mode Line Filter, Toroidal core ϕ14.0mm
LF2 = 20mH Common Mode Line Filter, Toroidal core ϕ14.0mm

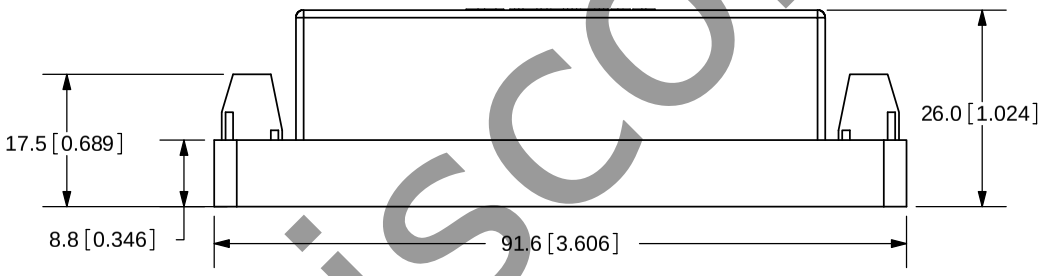
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REV.	DESCRIPTION	DATE
A	NEW DRAWING	9/11/2007





SCALE: 1:2



TOLERANCE:
±0.5mm UNLESS OTHERWISE SPECIFIED

RoHS

PIN ASSIGNMENTS
1. FG
2. AC (N)
3. AC (L)
5. +Vout
7. -Vout

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TITLE: AC-DC CONVERTER		REV: A
PART NO. FSC-S15	UNITS: MM [INCHES]	
DRAWN BY: ZRJ	APPROVED BY:	SCALE: 1:1

PC FILE NAME: FSC-S15

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Discontinued

For more information, please visit the product page.