SERIES: FSK-S30

DESCRIPTION: ac-dc converter

features
- **encapsulated compact case**
- **high efficiency**
- **universal input**
- **board mounting technology**
- **built in EMI filter**
- **100kHz fixed frequency**
- **fixed output voltage**
- **thermal shutdown**
- **short circuit protection**
- **low output ripple and noise**
- **isolated output**
- **2 year warranty**



RoHS

model number	input voltage	output voltage	power max.	ripple & noise max.	efficiency (%)
FSK-S30-3R3U	AC 85-264V / DC 110-340V	3.3V @ 6.0A	19.8 W	80 mVp-p	68
FSK-S30-5U	AC 85-264V / DC 110-340V	5V @ 6.0A	30 W	80 mVp-p	78
FSK-S30-12U	AC 85-264V / DC 110-340V	12V @ 2.5A	30 W	120 mVp-p	83
FSK-S30-15U	AC 85-264V / DC 110-340V	15V @ 2.0A	30 W	150 mVp-p	83
FSK-S30-24U	AC 85-264V / DC 110-340V	24V @ 1.25A	30 W	200 mVp-p	86

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			0.49	A
	AC input of 220 VAC			0.25	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%	(single and uncomplimentary dual)
		-3%		+3%	(complementary dual)
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

Discontinued

Please read our datasheet & drawing disclaimer here.

SERIES: FSK-S30 **DESCRIPTION:** ac-dc converter

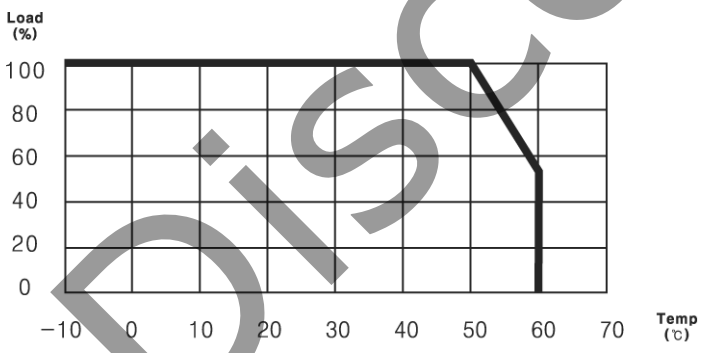
PROTECTION CIRCUIT

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

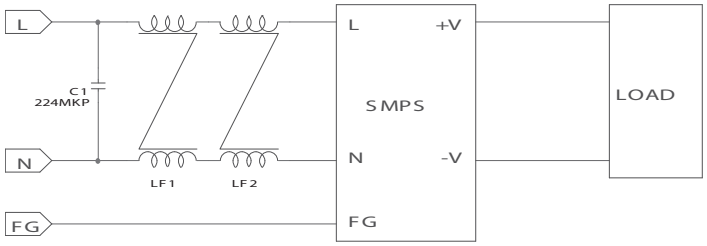
GENERAL

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	applied for 1 minute, 10mA				
(HI-POT)	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	3.0 x 10^5				hours
RoHS	yes				
safety	approved to UL60950(E222889), CSA C22.2 NO.60950, CE(EN60950) - through tuv				
warranty	standard warranty length			2	years

DERATING CURVE



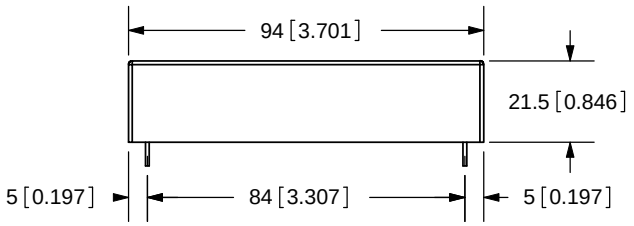
EXTERNAL EMI FILTER

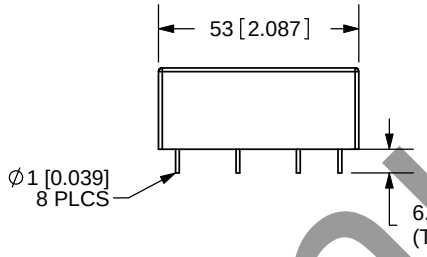


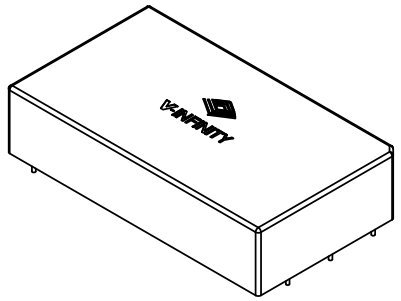
C1 = 220nF / 275Vac, X2 Capacitor
LF1 = 20mH Common Mode Line Filter, Toroidal core ϕ14.0mm
LF2 = 20mH Common Mode Line Filter, Toroidal core ϕ14.0mm

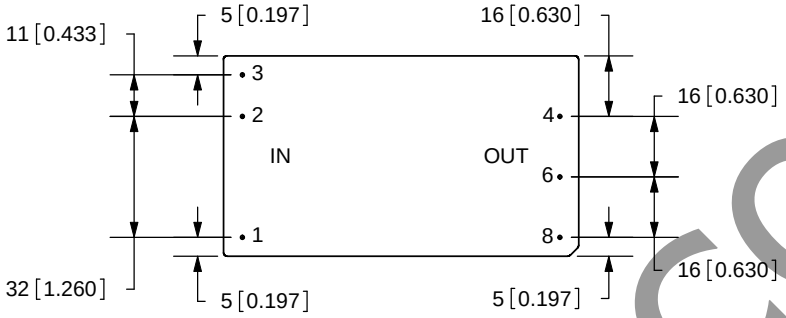
Discontinued

REV.	DESCRIPTION	DATE
A	NEW DRAWING	9/11/2006
B	corrected pin 5 and 7 output assignments	11/24/2008









TOLERANCE:
±0.3mm UNLESS OTHERWISE SPECIFIED

RoHS

PIN ASSIGNMENTS

Pin Number	Single Output
1	FG
2	AC (N)
3	AC (L)
4	No Connect
5	No Pin
6	+Vout
7	No Pin
8	-Vout

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TITLE: AC-DC Converter		REV: B
PART NO. FSK-S30	UNITS: MM [INCHES]	
DRAWN BY: JMS	APPROVED BY:	SCALE: 1:2

PC FILE NAME: FSK-S30

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Notes:
1. All dimensions are in mm [inches]
2. Weight: 200g or less

Discontinued