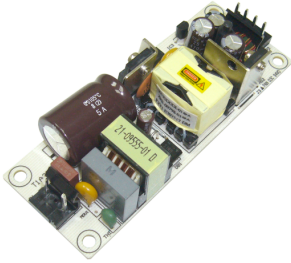


SHFA32 SERIES

30W Open-Frame Power Supply for Medical Equipment



- Wide Operating Voltage 80 to 275 VAC, 47 to 63Hz
- Single Output
- Over Load protection
- Input to Output : 2MOPP
- High ESD immunity
- Suitable professional healthcare facility
- Class II system

3 Year Warranty

Approvals:

Single Output

Product No.	Setting Voltage Range (Factory setting, can't be adjusted)		Output Current (Based on the output volt.)		Max Output Power (W)	Typ. Ripple & Noise (mVp-p)	Total Regulation (%)	Typ. Efficiency (%)	Typ. No-Load Consumption (W)	Hold-Up Time (ms)	Protection Mode
	min (VDC)	max (VDC)	min (A)	max (A)							
SHFA32-102	5.0	6.0	3.33	4.00	20	50	±5	74	0.5	12	Hiccup
SHFA32-S03	6.0	8.0	2.87	3.83	23	70	±5	77	0.5	12	Hiccup
SHFA32-S04	8.0	11.0	2.45	3.37	27	90	±5	78	0.5	12	Hiccup
SHFA32-S05	11.0	13.0	2.31	2.72	30	100	±5	83	0.5	12	Hiccup
SHFA32-S06	13.0	16.0	1.88	2.31	30	100	±5	84	0.5	12	Hiccup
SHFA32-S07	16.0	21.0	1.43	1.88	30	100	±5	85	0.5	12	Hiccup
SHFA32-S08	21.0	27.0	1.12	1.43	30	100	±3	86	0.5	12	Hiccup
SHFA32-S09	27.0	33.0	0.91	1.12	30	100	±3	86	0.5	12	Hiccup
SHFA32-S10	33.0	40.0	0.76	0.91	30	100	±3	86	0.5	12	Hiccup

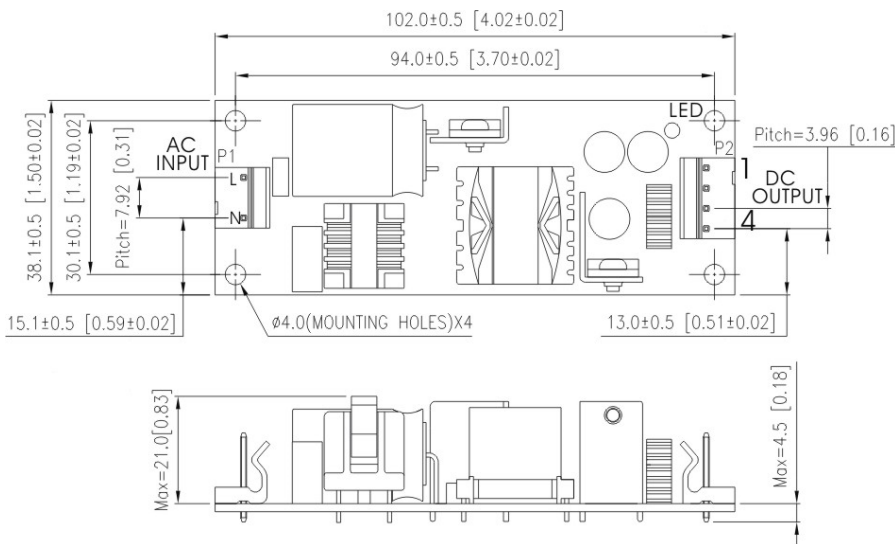
Electrical Characteristics

Parameter	Test Conditions	Min.	Typ.	Max.	Unit
Safety Approvals Input Voltage Range	Safety Approval & Specification in Label	100		240	VAC
Operate Voltage Range	Derate linearly from 100% load at 90VAC to 80% load at 80VAC	80		275	VAC
Input Frequency	Sine wave	47		63	Hz
Output Power Range	See Rating Chart			30	W
Low Line Input Current	Full load, Vin=100VAC			0.8	A
High Line Input Current	Full load, Vin=240VAC			0.4	A
Low Line Input Inrush Current	Full load, 25°C, Cool start, Vin=100VAC			25	A
High Line Input Inrush Current	Full load, 25°C, Cool start, Vin=240VAC			50	A
Efficiency	Full Load, Vin=230VAC	74		86	%
Line Regulation	Full Load, Vin=100~120VAC or 200~240VAC			1	%
Over Load Protection	Recovers automatically after fault condition is removed	110		150	%
Time of Transient Response	Io=Full Load to Half Load, Vin=110VAC			4	ms
Hold-Up Time	Full Load, Vin=110VAC			12	ms
Start Up Time	Full Load, Vin=100~240VAC			0.5	s
Insulation Resistance		50			MΩ
Ripple & Noise (Peak to Peak)				1	%
Temperature Coefficient	All output			±0.04	%/°C
Dielectric Withstanding Voltage(P-S)	Primary to Secondary, limit current<10mA			4000	VAC
EMC Emission	Compliance to EN55011(CISPR11), EN60601-1-2	B			Class

Environmental

Parameter	Test Conditions	Min.	Typ.	Max.	Unit
Operating Temperature	Derate linearly from 100% load at 40 to 50% load at 70	-10		70	°C
Storage Temperature	10~95% RH	-40		85	°C
Operating Humidity	non-condensing	0		95%	RH
Storage Humidity		0		95%	RH
Electro Static Discharge	Air Discharge, IEC61000-4-2			15	KV
Electro Static Discharge	Contact Discharge, IEC61000-4-2			8	KV
Mean Time Between Failure	Operation Temperature at 25 J, Calculated per MIL-HDBK-217F	200K			h
Operating Altitude (Elevation)	All Condition			3000	m
Vibration	10~500Hz,10min./1cycle, 60min.each along X, Y, Z axes			5	G
Surge Voltage	Line-Neutral			1	KV
Surge Voltage	Line-PE & Neutral-PE			2	KV

Mechanical Drawing & Technical Chart



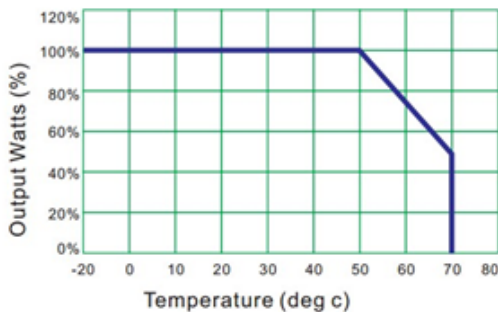
PIN Chart:

Pin	1	2	3	4
Product No.	Vout	Vout	RTN	RTN
SHFA32-SXX	Vout	Vout	RTN	RTN

Note:

1. Dimensions are shown in mm & inch
2. Weight: approx. 200g
3. Input connector mates with Molex housing 09-50-3031 and Molex 2478 series crimp terminal.
4. Output connector mates with Molex housing 09-50-3041 and Molex 2478 series crimp terminal.

Derating Curve



1. Operating Temperature: -10 to 70°C
2. Derate linearly from 100% load at 50°C to 50% load at 70°C