

SMFA80 SERIES



80W Open-Frame Power Supply for Medical Equipment

- Wide Input Voltage 90 to 260 VAC, 47 to 63Hz
- Output Voltage Available From 5VDC Thru 36VDC
- Internal EMI filter
- Input connector mates with Molex housing 09-50-3031 and Molex 2478 series crimp terminal
- Output connector mates with screw terminal (Terminal Block)(16-22AWG) or Molex housing 09-50-3121 and Molex 2478 series crimp terminal
- Single Output
- Size: 3" x 5" x 1.1"
- Input Surge Current, Over Voltage and Overload protection
- Output Voltage Protection (Crowbar Design)

3 Year Warranty

Approvals:    

Single Output

Product Number	Output Voltage	Max. Output Current	Total Regulation	Maximum Output Power
SMFA80-S02	5 VDC	14.00 A	5%	70W
SMFA80-S03	7 VDC	11.43 A	5%	80W
SMFA80-S04	9 VDC	8.89 A	4%	80W
SMFA80-S05	12 VDC	6.66 A	3%	80W
SMFA80-S06	15 VDC	5.33 A	3%	80W
SMFA80-S07	18 VDC	4.44 A	3%	80W
SMFA80-S08	24 VDC	3.33 A	2%	80W
SMFA80-S09	30 VDC	2.66 A	2%	80W
SMFA80-S10	36 VDC	2.22 A	2%	80W

Electrical Characteristics

Parameter	Test Conditions	Min.	Typ.	Max.	Unit
Input Voltage	Operating Voltage	90		260	VAC
Input Frequency		47		63	Hz
Output Power Range	Vin= 90 to 264 VA C	0		80	W
Input Current (Low Line)	Io=Full load, Vin=115 VAC			1.2	A
Input Current (High Line)	Io=Full load, Vin= 230 VAC			0.4	A
Low Line Inrush Current	Io=Full load, 25°C, Cool start, Vin=115VAC		15	18	A
High Line Inrush Current	Io=Full load, 25°C, Cool start, Vin=230VAC		30	34	A
Efficiency	Io=Full Load, Vin=230VAC	70	80	85	%
Line Regulation	Io=Full Load		0.5	1	%
Load Regulation	Vin=230VAC		3	7	%
Over Voltage Protection		112		132	%
Over Current Protection		110		150	%
Transient Response	Io=Full Load to Half Load, Vin=100VAC			4	mS
Hold-Up Time	Io=Full Load, Vin=110VAC	16			mS
Start Up Time	Io=Full Load, Vin=100VAC	0.3	1	2	S
Ripple & Noise (Peak to Peak)	Full Load, Vin=90VAC		0.5	1	%
Safety Ground Leakage Current	Io= Full Load, Vin=240VAC/60Hz			0.1	mA
Temperature Coefficient	All output	-0.04		0.04	%/°C

Conditions

Parameter	Test Conditions	Min.	Typ.	Max.	Unit
Operating Temperature		0	50	70	°C
Storage Temperature		-40		85	°C
Relative Humidity		5		95	%
Operating Temperature at 25°C, Calculated per MIL-HDBK-217F		0.1M			Hrs
De-rate linearly from 100% load at 50°C to 50% load at 70°C					

Approvals and Compliances

Parameter	Test Conditions	Min.	Unit
Dielectric Withstanding Voltage for Primary to secondary	Primary to secondary	5656	VDC
Dielectric Withstanding Voltage for Primary to Ground	Primary to ground	2828	VDC
Isolation Resistance	Test Voltage = 500VDC	50	MΩ
EMI requirements for CISPR-11	Vin=220VAC	B	CLASS
EMI requirements for FCC PART-18	Vin=110VAC	B	CLASS

Mechanical and PIN out

PIN CHART

MODEL	PIN	1	2	3	4	5	6	7	8	9	10	11	12
SMFA80-SXX-12pin		RTN	RTN	RTN	RTN	RTN	RTN	Vout	Vout	Vout	Vout	Vout	Vout

MODEL	PIN	1	2	3	4	5	6
SMFA80-SXX-6pin		RTN	RTN	RTN	Vout	Vout	Vout

Note:

1. Dimensions are shown in mm.
2. Weight: 420g approx.
3. Input connector mates with Molex housing 09-50-3031 and Molex 2478 series crimp terminal
4. Output connector mates with screw terminal (Terminal Block)(16-22AWG) or Molex housing 09-50-3121 and Molex 2478 series crimp terminal

