

SMFA123 SERIES

125W Open-Frame Power Supply for Medical Equipment

- Wide Operating Voltage, 90 to 260 VAC, 47 to 63 Hz
- Dual Output (5V Standby Output)
- Remote On/Off control
- Crowbar Mode Over Voltage Protection
- Input to Output : 2MOPP
- High ESD immunity
- Suitable professional healthcare facility
- Active Power Factor Correction
- Hold-Up Time over 50ms

5 Year Warranty

Approvals:

Single Output

Product Number	Output Voltage		Max. Output Current		Total Regulation _n	Typ. Efficiency (%)	Ripple & Noise (mVp-p)	Max. Output Power	Pno (max.)
	Vo1	Vsb	Io1	Isb					
	VDC	VDC	A	A					
SMFA123-S05	12.0	5.0	9.00	3.0	3%	88	100	123W	0.5W

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		90		260	VAC
Input Frequency	Sine wave	47		63	Hz
Power Factor Correction		0.95		0.99	
Output Power Range	See Rating Chart			125	W
Low Line Input Current	Full load, Vin=100VAC			1.7	A
High Line Input Current	Full load, Vin=240VAC			1.0	A
Low Line Input Inrush Current	Full load, 25°C, Cool start, Vin=100VAC			35	A
High Line Input Inrush Current	Full load, 25°C, Cool start, Vin=240VAC			65	A
Safety Ground Leakage Current	Vin=240VAC, Fi=60Hz			0.1	mA
Efficiency	Full Load, Vin=230VAC			88	%
Line Regulation	Full Load, Vin=100~120VAC or 200~240VAC			1	%
Over Voltage Protection		112		132	%
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=100VAC			50	ms
Start Up Time	Full Load, Vin=100~240VAC			1.5	s
Insulation Resistance		50			MΩ
Ripple & Noise (Peak to Peak)				1	%
Dielectric Withstanding Voltage(P-S)	Primary to Secondary, limit current<10mA			4000	VAC
Dielectric Withstanding Voltage(P-G)	Primary to PE, limit current<10mA			1500	VAC
EMC Emission	Compliance to EN55011(CISPR11), EN60601-1-2	B			Class

Environmental

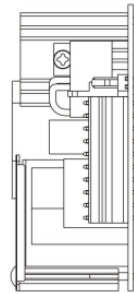
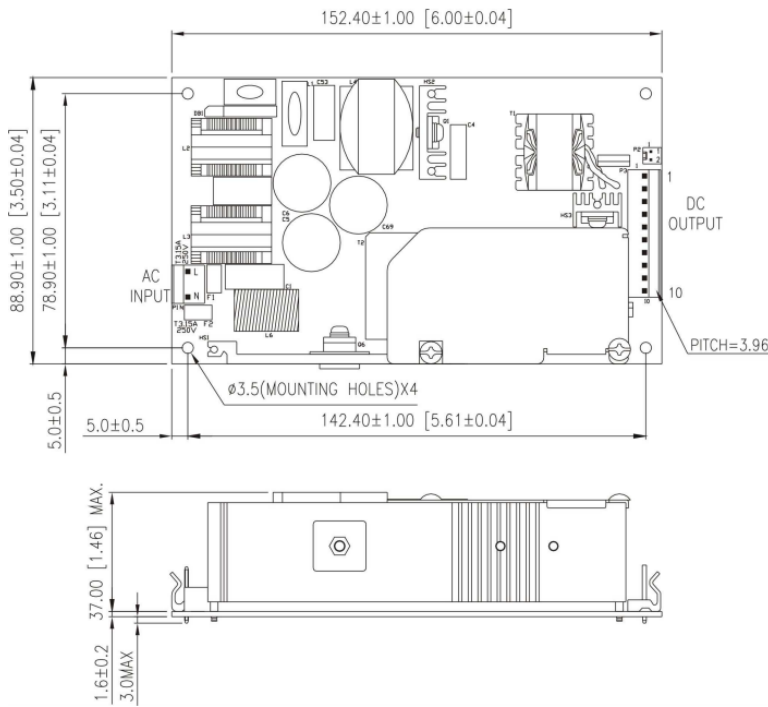
Parameter	Test Conditions	Min.	Typ.	Max.	Unit
Operating Temperature	Derate linearly from 100% load at 50 to 50% load at 70	-10		70	°C
Storage Temperature	10~95% RH	-40		85	°C
Operating Humidity	non-condensing	0		95%	RH
Storage Humidity		0		95%	RH
Electro Static Discharge	Air Discharge, IEC61000-4-2			15	KV
Electro Static Discharge	Contact Discharge, IEC61000-4-2			8	KV
Mean Time Between Failure	Operation Temperature at 25 °C, 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 and PIN Out

PIN CHART

PART NO.	PIN	1	2	3	4	5	6	7	8	9	10
SMFA123-SXX	Remote On/Off	Vsb (+5VDC)	COM	COM	COM	COM	Vo2	Vo2	Vo2	Vo2	Vo2

PART NO.	PIN	1	2
SMFA123-SXX		Vsb (+5VDC)	Remote On/Off



Note:

1. Dimensions are shown in mm.
2. Weight: 550g approx.
3. Input connector mates with Molex housing 09-52-4054 and Molex 2478 series crimp terminal.
4. Output connector mates with Molex housing 09-52-4134 and Molex 2478 series crimp terminal.
5. Remote control connector mates with Molex housing

Derating Chart:

