SMDA15C SERIES

15W Desktop Power Supply For Medical Equipment

- Wide Input Voltage 90 to 264 VAC, 47 to 63Hz
- IEC-320-C6 input inlet
- Single Output
- Output Voltage Available From 5VDC Thru 36VDC
- Over Voltage, Over Load, and Over Temperature Protection
- Class I Insulation
- Energy Star 2.0, CEC Level V, and RoHS Compliance

3 Year Warranty

Approvals:

Single Output

Part Number	Output Voltage	Max. Output Current	Total Regulation	Max. Output Power
SMDA15C-S02	5 ~ 6 VDC	2.60 ~ 2.16 A	5%	13W
SMDA15C-S03	6 ~ 8 VDC	2.16 ~ 1.62 A	5%	13W
SMDA15C-S04	8 ~ 11 VDC	1.87 ~ 1.36 A	5%	15W
SMDA15C-S05	11 ~ 13 VDC	1.36 ~ 1.15 A	5%	15W
SMDA15C-S06	13 ~ 16 VDC	1.15 ~ 0.93 A	5%	15W
SMDA15C-S07	16 ~ 21 VDC	0.93 ~ 0.71 A	5%	15W
SMDA15C-S08	21 ~ 27 VDC	0.71 ~ 0.55 A	3%	15W
SMDA15C-S09	27 ~ 33 VDC	0.55 ~ 0.45 A	3%	15W
SMDA15C-S10	33 ~ 36 VDC	0.45 ~ 0.41 A	3%	15W

The total regulation on model S02, S03, S05 is required to use AWG#16 / 4FT output cable.
The total regulation on model S04, S06~S10 is required to use AWG#18 / 4FT output cable.
The regulation and efficiency are not guaranteed if changes the output cable

Electrical Characteristics

Parameter	Test Conditions	Min.	Typ.	Max.	Unit
Input Voltage	Operating Voltage	90		264	VAC
Input Frequency		47		63	Hz
Output Power Range	Vin=90 to 264VAC	0		15	W
Input Current (Low Line)	Io=Full load, Vin=115VAC		0.25	0.33	A
Input Current (High Line)	Io=Full load, Vin=230VAC		0.17	0.18	A
Low Line Inrush Current	Io=Full load, 25°C Cool start, Vin=115VAC		14	16	A
High Line Inrush Current	Io=Full load, 25°C Cool start, Vin=230VAC		28	30	A
Efficiency	Io=Full Load, Vin=230VAC	73		85	%
Line Regulation	Io=Full Load		0.5	1	%
Load Regulation	Vin=230VAC	1	3	5	%
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	10	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			0.3	mA
Temperature Coefficient	All output	-0.04		0.04	%/°C
No-Load Power Consumption	No load, Vin=240VAC		0.25	0.3	W
Thermal Shutdown By Junction Temperature Controller *	The parameter is not subject to production test-verified by design/characterization of integrated controller. Auto recovery.	-20		125	°C

*When the power system interruption is isolated, the product would re-start after recovering by hand.

Conditions

Parameter	Test Conditions	Min.	Typ.	Max.	Unit
Operating Temperature		0	50	70	℃
Storage Temperature		-40		85	℃
Relative Humidity		5		95	%
Operation temperature at 25°C, calculated per MIL-HDBK-217F		0.1M			Hrs
Derate 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 EN55022	Vin=230VAC,50HZ	B	CLASS
EMI requirements for FCC PART-18	Vin=120VAC,60HZ	B	CLASS

Mechanical and PIN out

Note:

1. Dimensions are shown in mm.
2. Weight: 170gs approx.