SMDA32B SERIES

30W Desktop Power Supply for Medical Equipment

- Wide Operating Voltage, 80 to 275 VAC, 47 to 63 Hz
- IEC-320-C8 Input Inlet
- Single Output
- Crowbar Mode Over Voltage Protection
- Input to Output : 2MOPP
- High ESD immunity
- Suitable professional healthcare facility
- High Altitude of 5000m

5 Year Warranty

Approvals:

Single Output

Model Number	Output Voltage	Max. Output Current	Load Regulation	Maximum Output Power
SMDA32B-S02	5 ~ 5.99 VDC	4.00 ~ 3.33 A	±5%	20W
SMDA32B-S03	6 ~ 8 VDC	3.83 ~ 2.87 A	±5%	23W
SMDA32B-S04	8 ~ 11 VDC	3.38 ~ 2.45 A	±5%	27W
SMDA32B-S05	11 ~ 13 VDC	2.74 ~ 2.30 A	±5%	30W
SMDA32B-S06	13 ~ 16 VDC	2.30 ~ 1.88 A	±5%	30W
SMDA32B-S07	16 ~ 21 VDC	1.88 ~ 1.43 A	±5%	30W
SMDA32B-S08	21 ~ 27 VDC	1.43 ~ 1.11 A	±3%	30W
SMDA32B-S09	27 ~ 33 VDC	1.11 ~ 0.91A	±3%	30W
SMDA32B-S10	33 ~ 40 VDC	0.91 ~ 0.75A	±3%	30W
SMDA32B-S11	40 ~ 48 VDC	0.75 ~ 0.63A	±3%	30W

Total Regulation is conditioned by below configuration
(SMDA32B-S02~S04: AWG16/4FT output cable)
(SMDA32B-S05~S11: AWG18/6FT output cable)

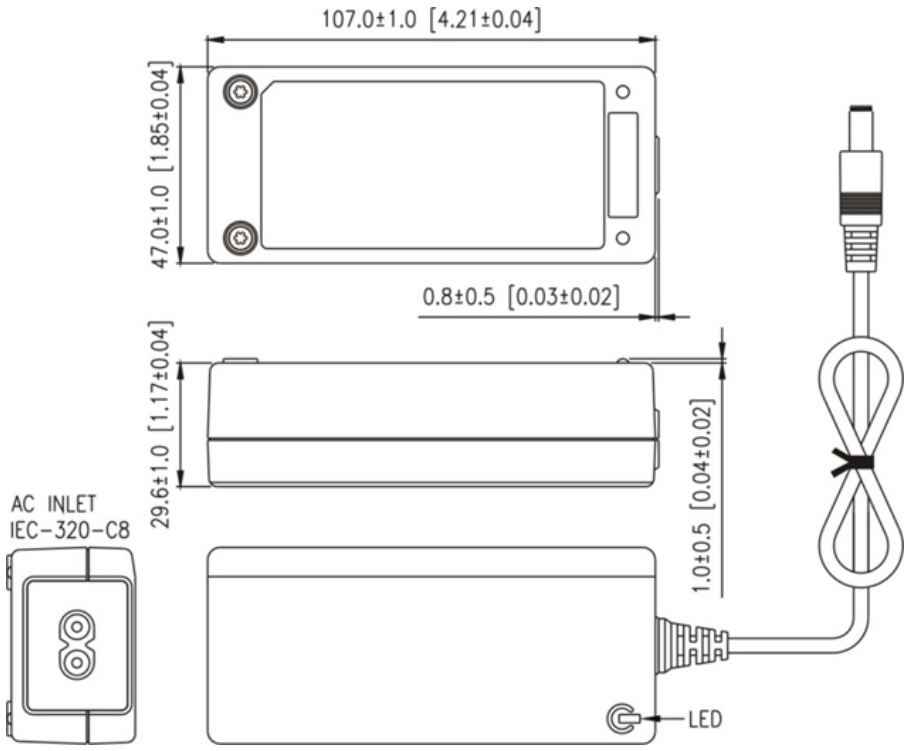
Electrical Characteristics

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			0.6	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			28	A
High Line Input Inrush Current	Full load, 25°C, Cool start, Vin=240VAC			67	A
Efficiency	Full Load, Vin=230VAC	80		86	%
Line Regulation	Full Load, Vin=100~120VAC			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			12	ms
Start Up Time	Full Load, Vin=100~240VAC			2	s
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 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 J, Calculated per MIL-HDBK-217F	200K			h
Operating Altitude (Elevation)	All Condition			5000	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

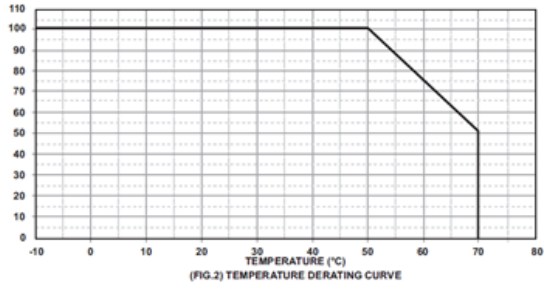
Mechanical Diagram



Note:

1. Dimensions are shown in mm & inch
2. Weight: approx. 265-280g
3. Optional output connector.

Derating Curve



(FIG.2) TEMPERATURE DERATING CURVE

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