

MBU81 SERIES

80W Open Frame Switching Power Supplies For Medical Equipment.

Description:

The MBU81 series of compact, open frame constructed, AC/DC switching mode power supplies provide 80 Watts of continuous output power. They are suited for use in hospital instrument and many other applications. All models meet FCC Part-18 class B and CISPR-11 EN55011 class B emission Limits and are designed to comply with ANSI/AAMI ES 60601-1: 2005(UL/cUL 3rd Edition), EN 60601-1:2006 (TUV/T-mark 3rd Edition) and new CE requirements. All units are 100% burned in and tested.

Features:

- Wide Operating Voltage 90 to 260 VAC, 47 to 63 Hz
- Internal EMI filter
- Single Output
- 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
- Input Surge Current, Over Voltage and Over Load protection
- Output Voltage Protection(Crowbar Design)
- Active Power Factor Correction
- Size: 3"x5"x1.1"
- Class I
- 3 year warranty



Safety Approvals :



Electrical Characteristics:

Sym.	Parameter	Test Conditions	Min.	Typ.	Max.	Unit
Vin	Safety Approvals Input Voltage Range		100		240	VAC
	Operate Voltage Range		90		260	VAC
fin	Input Frequency		47		63	Hz
PF	Power Factor Correction	Io=Full load, Vin=100~240VAC	0.95	0.97	1.0	
Po	Output Power Range	Vin=90 to 260 VAC	0		80	W
Vo	Output Voltage Range		See rating Chart			V
Io	Output Current Range		See rating Chart			A
Iil	Input Current (Low Line)	Io=Full load, Vin=100VAC			1.2	A
Iih	Input Current (High Line)	Io=Full load, Vin=240VAC			0.4	A
Irl	Low Line Inrush Current	Io=Full load, 25°C, Cool start, Vin=115VAC		15	18	A
Irh	High Line Inrush Current	Io=Full load, 25°C, Cool start, Vin=230VAC		30	34	A
Eff	Efficiency	Io=Full load, Vin=230VAC	70	80	85	%
REG-i	Line Regulation	Io=Full load		0.5	1	%
REG-o	Load Regulation	Vin=230VAC		3	7	%
OVP	Over Voltage Protection		112		132	%
OCP	Over Current Protection		110		150	%
Ttr	Time of Transient Response	Io=Full load to Half Load, Vin=100VAC			4	mS
Thold	Hold-Up Time	Io=Full load, Vin=110VAC	16			mS
Ts	Start Up Time	Io=Full load, Vin=100VAC	0.3	1	2	S
Vp-p	Ripple & Noise (Peak to Peak)	Full load, Vin=90VAC		0.5	1	%
Ilk	Safety Ground Leakage Current	Io=Full load, Vin=240VAC			0.1	mA
TC	Temperature Coefficient	All output	-0.04		0.04	%/°C

Environmental :

Sym.	Parameter	Test Conditions	Min.	Typ.	Max.	Unit
Toper	Operating Temperature		0	50	70	°C
Tstg	Storage Temperature		-40		85	°C
Ho	Operating Humidity		0		95	%
Hr	Storage Humidity		0		95	%
MTBF	Operating Temperature at 25°C, Calculated per MIL-HDBK-217F		0.1M			Hrs
Pd	Derate linearly from 100% load at 50°C to 50% load at 70°C					

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Safety Specifications:

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

Output Voltage And Current Rating Chart (Single Output) :

Model Number	Output Voltage	Output Current	Total Regulation	Maximum Output Power
MBU81-102	5 VDC	14.00 A	5%	70W
MBU81-103	7 VDC	11.43 A	5%	80W
MBU81-104	9 VDC	8.89 A	4%	80W
MBU81-105	12 VDC	6.66 A	3%	80W
MBU81-106	15 VDC	5.33 A	3%	80W
MBU81-107	18 VDC	4.44 A	3%	80W
MBU81-108	24 VDC	3.33 A	2%	80W
MBU81-109	30 VDC	2.66 A	2%	80W
MBU81-110	36 VDC	2.22 A	2%	80W

PIN CHART

PIN MODEL	1	2	3	4	5	6	7	8	9	10	11	12
MBU81-1XX-12PIN	RTN	RTN	RTN	RTN	RTN	RTN	Vout	Vout	Vout	Vout	Vout	Vout

PIN MODEL	1	2	3	4	5	6
MBU81-1XX-6PIN	RTN	RTN	RTN	Vout	Vout	Vout

Mechanical Specifications :

