

## 24 ~ 50W AC-DC Single Output and Medical Type Desktop

## MES50A series



Features :

- Universal AC input / Full range
- 3 pole AC inlet IEC320-C14
- \* Low leakage current <230 $\!\mu\text{A}$
- Class I power ( with earth pin)
- Full output 3~48V safety approval
- Protections: Short circuit / Overload / Over voltage / Over temp.
- Fully enclosed plastic case
- Medical safety approved (MOPP level)
- Fix switching frequency and regulation
- Topology: Top switch circuit
- LED indicator for power on
- Approvals: UL / CUL / CB / FCC / CE
- 2 years warranty



## SPECIFICATION

ORDER NO.		MES50A-0R1B	MES50A-1R1B	MES50A-1-1R1B	MES50A-2P1J	MES50A-3P1J	MES50A-4P1J	MES50A-5P1J	MES50A-6P1J	MES50A-7P1J	MES50A-8P1	
OUTPUT	SAFETY MODEL NO.	MES50A-0	MES50A-1	MES50A-1-1	MES50A-2	MES50A-3	MES50A-4	MES50A-5	MES50A-6	MES50A-7	MES50A-8	
	DC VOLTAGE Note.2	3.3V	5V	7.5V	9V	12V	15V	18V	24V	28V	48V	
	RATED CURRENT	7.5A	7.5A	5.33A	5.0A	4.16A	3.33A	2.77A	2.08A	1.78A	1.04A	
	CURRENT RANGE	0~7.5A	0~7.5A	0~5.33A	0~5.0A	0~4.16A	0~3.33A	0~2.77A	0~2.08A	0~1.78A	0~1.04A	
	RATED POWER	24.75W	37.5W	40W	45W	50W	50W	50W	50W	50W	50W	
	RIPPLE & NOISE (max.) Note.3	50mVp-p	50mVp-p	75mVp-p	90mVp-p	100mVp-p	100mVp-p	150mVp-p	150mVp-p	150mVp-p	200mVp-p	
	VOLTAGE ADJ. RANGE	Fixed										
	VOLTAGE TOLERANCE Note.4	±10%	±6.0%	±5.0%	±5.0%	±3.0%	±3.0%	±3.0%	±2.0%	±2.0%	±2.0%	
	LINE REGULATION Note.5	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	
	LOAD REGULATION Note.6	±10%	±6.0%	±5.0%	±5.0%	±3.0%	±3.0%	±3.0%	±2.0%	±2.0%	±2.0%	
	SETUP, RISE, HOLD UP TIME	300ms, 50ms, 16ms at full load										
INPUT	VOLTAGE RANGE	90 ~ 264VAC 135~370VDC										
	FREQUENCY RANGE	47~63Hz										
	EFFICIENCY (Typ.)	60%	67%	70%	72%	74%	75%	78%	78%	80%	80%	
	AC CURRENT	1.5A / 100VAC										
	INRUSH CURRENT (max.)	90A / 230VAC										
	LEAKAGE CURRENT (max.) Note.7	Earth leakag	Earth leakage current < 230µA/264VAC , Touch current < 60µA/264VAC									
PROTECTION	OVERLOAD	112 ~ 250% rated output power 150 ~ 350% rated output power										
		Protection type : Hiccup mode, recovers automatically after fault condition is removed										
	OVER VOLTAGE	110 ~ 150% rated output voltage										
		Protection type : Hiccup mode, recovers automatically after fault condition is removed										
		Tj 135℃ typically (IC1) detect on main control IC										
	OVER TEMPERATURE	Protection type : Shut down o/p voltage, recovers automatically after temperature goes down										
ENVIRONMENT	WORKING TEMP.	0∼+65°C (F	0 ~ +65 $^\circ { m C}$ (Refer to "Derating Curve")									
	WORKING HUMIDITY	20% ~ 90% RH non-condensing										
	STORAGE TEMP., HUMIDITY	-20 ~ +85°C, 10 ~ 95% RH										
	TEMP. COEFFICIENT	±0.03% / °C (0 ~ 50°C)										
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes										
SAFETY & EMC (Note. 8)	SAFETY STANDARDS	ANSI/AAMI ES60601-1, IEC60601-1 approved										
	WITHSTAND VOLTAGE	I/P-O/P: 5656VDC , I/P-FG: 2828VDC										
	ISOLATION RESISTANCE	I/P-O/P, I/P-FG:100M Ohms / 500VDC / 25°C/ 70% RH										
	EMC EMISSION	Compliance to EN55011(CISPR11) class B, EN61000-3-2,3, FCC part 15 CLASS B & part 18										
	EMC IMMUNITY	Compliance to EN60601-1-2 (EN61000-4-2,3,4,5,6,8,11), light industry level, criteria A										
OTHERS	MTBF											
	DIMENSION	147*75.5*43.2mm (L*W*H)										
	PACKING	0.55Kg; 36pcs / 21Kg / CARTON										
CONNECTOR	PLUG	See page 2, Other type available by customer requested										
	CABLE	See page 2,	See page 2, Other type available by customer requested									
NOTE	2.DC voltage: The output volt 3.Ripple & noise are measure 4.Tolerence: includes set up 1 5.Line regulation is measure 6.Load regulation is measure 7.Touch current was measure	at 230VAC input, rated load, 25°C 70% RH ambient. age set at point measure by plug terminal & 50% load. ed at 20MHz by using a 12" twisted pair terminated with a 0.1uf & 47uf capacitor. tolerance, line regulation, load regulation. I from low line to high line at rated load. d from 0% to 100% rated load. ed from primary input to DC output. ered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets										



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