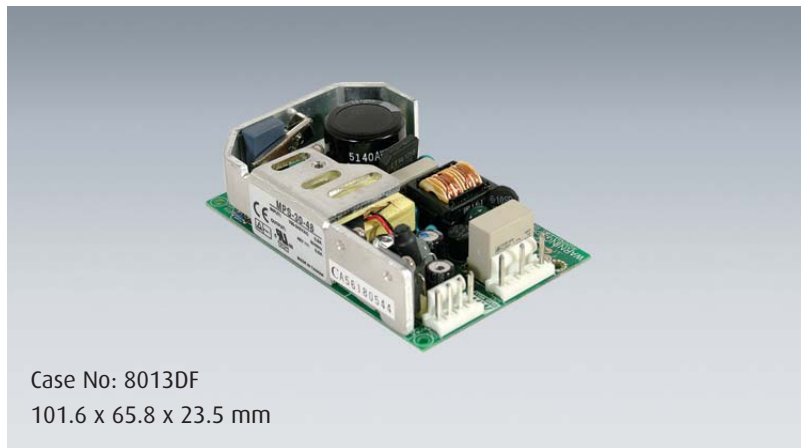


MPS-30 Series

30W Single Output Medical Type Power Supply



Case No: 8013DF
101.6 x 65.8 x 23.5 mm

Features

- Universal AC input/ Full range
- Low leakage current <200µA
- Protections: Short circuit, Overload Over Temperature and Over voltage
- Fixed switching frequency at 100KHz
- Low cost, High reliability



Specification

INPUT	Voltage	88V ~ 264VAC universal full range or 120V ~ 370VDC.					
	Frequency	47 ----- 63 Hz					
	Current	<0.8A@115VAC; 0.5A@230VAC full load					
	Inrush Current	<30A@230VAC Cold start					
	Leakage Current	Earth leakage current <200µA@264VAC input					
OUTPUT	MODEL No.	MPS-30-5	MPS-30-12	MPS-30-15	MPS-30-24	MPS-30-27	MPS-30-48
	Voltage	5V	12V	15V	24V	27V	48V
	Rated Current	5A	2.5A	2A	1.2A	1.1A	0.6A
	Current Range	0~5A	0~2.5A	0~2A	0~1.2A	0~1.1A	0~0.6A
	Output Tolerance	± 3%	± 3%	± 3%	± 3%	± 3%	± 2%
	Line Regulation	± 1%	± 1%	± 0.5%	± 0.5%	± 0.5%	± 0.5%
	Load Regulation	± 2%	± 1%	± 1%	± 1%	± 1%	± 1%
	Ripple Noise MAX.	80mV	120mV	150mV	240mV	240mV	240mV
	Efficiency (TYP.)	72%	75%	76%	77%	78%	78%
	Rated Power	25W	30W	30W	28.8W	29.7W	28.8W
PROTECTION	Over Voltage	5.5~6.75V	13.2~16.2V	16.5~20.25V	26.4~32.4V	29.7~36.45V	52.8~64.8V
	Over Temperature	Hiccup mode, recovers automatically after fault condition is removed Tj 135°C typically (U1) Detect on main control IC Shut down o/p voltage, re-power on to recover					
	Over Load	Above 105% rated output power Hiccup mode, recovers automatically after fault condition is removed					
ELEC. CHAR.	Rise Time	<30mS@115~230VAC, full load					
	Hold up Time	>70mS@230VAC, 12mA@115VAC, full load					
	Setup Time	<0.5 Sec at full load					
ENVIRONMENT	Temperature	Operating: -10 ~ +60°C ; Storage: -20~ +85°C					
	Humidity	Operating: 20% ~ 90% RH (non condensing); Storage: 10% ~ 95% RH					
SAFETY	Withstand Voltage	I/P-O/P4KVAC; I/P-FG:2KVAC; O/P-FG:SHORT					
	Isolation Resistance	I/P-O/P, I/P-FG, 100MΩ/500VDC					
	Safety Standard	ANSI/AAMIES60601-1, TUV EN60601-1, IEC60601-1 Approved					
EMC	EMI	EN55011 (CISPR11) Class B, EN61000-3-2,3					
	EMS	EN61000-4-2,3,4,5,6,8,11; EN55024, EN60601-1-2, Medical Level, Criteria A					
OTHERS	Cooling	Cooling by free air convection					
	M.T.B.F.	547K hrs min. MIL-HDBK-217F (°C)					
	Packing	0.16Kg; 90pcs/15.8Kg/1.02 CUFT					

1 All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature

2 Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1µf & 47µf parallel capacitor

3 Tolerance: includes set up tolerance, line regulation and load regulation

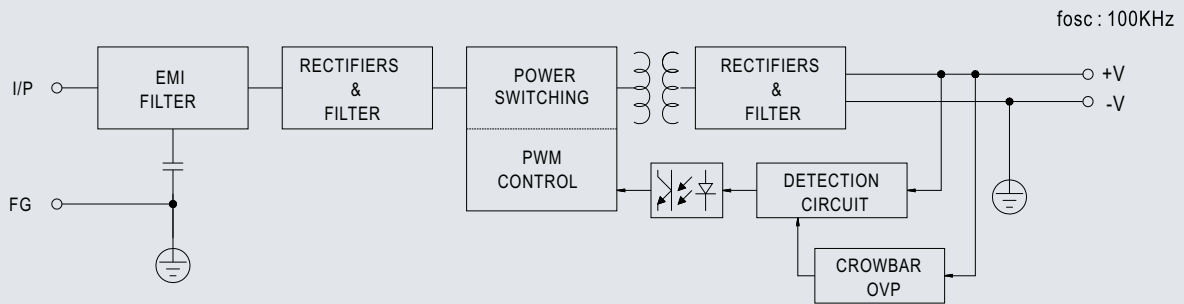
4 The power supply is considered a component which will be installed into final equipment. The final equipment must be re-confirmed that it still meets EMC directives

MPS-30 Series

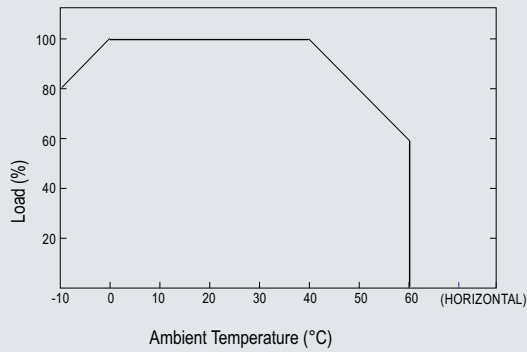
30W Single Output Medical Type Power Supply



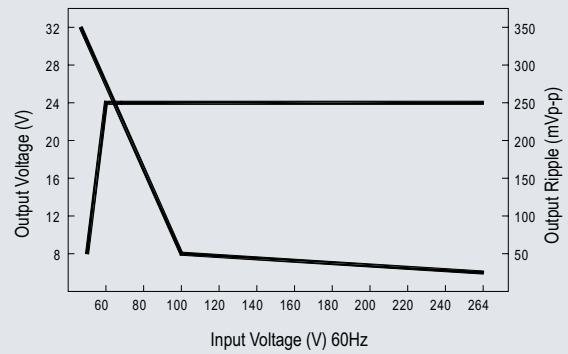
Block Diagram



De-Rating Curve



Static Characteristics



Dimensions

AC Input Connector (CN1): Molex 41791-5 or equivalent

Pin No.	Assignment	Mating Housing	Terminal
1	FG	Molex 2139 or equivalent	Molex 2478 or equivalent
2,4	No Pin	Molex 2139 or equivalent	Molex 2478 or equivalent
3	AC/N	Molex 2139 or equivalent	Molex 2478 or equivalent
5	AC/L	Molex 2139 or equivalent	Molex 2478 or equivalent

DC Input Connector (CN2): Molex 41791-4 or equivalent

Pin No.	Assignment	Mating Housing	Terminal
1,2	-V	Molex 2139 or equivalent	Molex 2478 or equivalent
3,4	+V	Molex 2139 or equivalent	Molex 2478 or equivalent

