

MINT1022

22 Watt Single Output Series



Medical - Universal Input Power Supply

- 90-264 VAC Input
- Overvoltage and Short Circuit Protection
- Compact Size, Low Profile 2.0" x 3.5" x 0.67"
- Approved to UL, CSA and EN Standards
- CE Compliant (LVD, EMC, RoHS)
- Low Standby Power Loss (<0.5 W)



International Safety Standard Approvals



Specifications

All specifications are typical at nominal input, full load at 25°C unless otherwise stated

Output Specifications

Output Power	Natural Convection	22 Watts continuous, 24 W peak for 60 seconds, 10% duty cycle
Minimum Load		Not required
Total Regulation	(Line and Load)	1.5%, see table
Rise Time	At turn-on	100 ms max.
Transient Response	50% step load, 0.2A/μs	4% max. dev., 1.5 msec max. recovery to 0.5%
Temperature Coefficient		+/-0.03%/° C typical
Overvoltage Protection		Standard - See chart
Voltage Adjustability		Factory set with fixed resistors to maximize reliability

Input Specifications

Voltage	Universal Input	90-240VAC (Nominal 100-240VAC)
Frequency		47-63Hz
Input Surge Current	Thermistor limited	32A max.
Earth leakage current	264V, 60Hz	125 μA max. (200 μA single fault)
Input Current	120VAC 230VAC	0.45A 0.25A
Input Fuse	F1	2.0 A

Environmental Specifications

Thermal Performance	Operating ambient (see ratings chart) Non-operating 0-50° C 50-70° C ambient	0-70° C -40 to +85° C Full load. See table. derate to 50%
Relative Humidity	Non-condensing	0-95% RH
Maximum Altitude	Operating /non-operating	10,000 ft./40,000 ft. max.
Vibration	5Hz-500Hz	2.5 g rms
Shock	Per MIL-STD-810E	516.4 part IV

General Specifications

Hold-up Time	120VAC, 60Hz	15ms min. at 22W output
Efficiency	120VAC, 22W output	70-80% typical depending on output voltage
Switching Frequency	Fixed	15 to 100kHz, varies with line and load
Safety Approvals	Medical	UL/EN/IEC 60601-1 CSA22.2 No.601
Maximum Weight		100 Grams (0.20 lbs)
MTBF	25° C, ground benign, Telcordia	300,000 hours
Overload and short circuit protection	Fully protected	Cycling type power limit

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Medical Model	Voltage Output	Output Current	Total Regulation	Initial Setpoint Tolerance	Ripple/ Noise	OVP Setpoint
MINT1022A0505I01	5V	4.40A	+/-1.5%	+/-2.5%	100mV	6.2+/-0.6V
MINT1022A1205I01	12V	1.83A	+/-1.5%	+/-2.5%	120mV	14.1+/-1.1V
MINT1022A2405I01	24V	0.92A	+/-1.5%	+/-2.5%	240mV	28+/-2.5V

Notes

- Other output voltages available by special order
- Regulation from initial setpoint for 50% load change from 50% to 0% or 100%
- Peak output rating is 24 Watts for 1 minute
- 20MHz Bandwidth scope, differential mode. Measured with scope probe directly across output terminals of the power supply with load terminated with 0.1 μ F
- Heatsink temperatures should not be allowed to exceed 90° C
- Installation data is online at www.slpower.com

Condor Part Number Key

M	I	N	T	1	022	A	05	05	I	01
Medical	Internal	Standard Product	Factory Designation	No. of Outputs	Output Wattage	Initial Design of the Product	Output Voltage	Output Connector	Input Connector	Standard Configuration

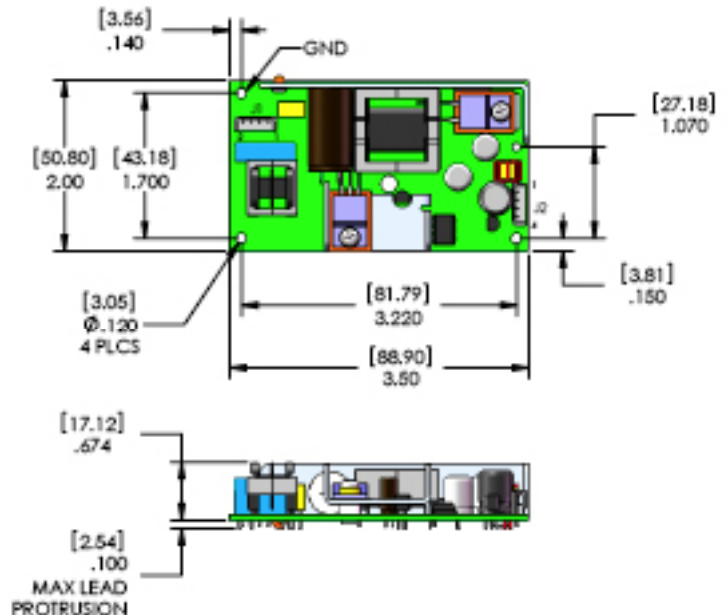
General Specifications (continued from p. 1)

EMC Information

Conducted emissions	EN55011	Level B
Radiated emissions	EN55011	Level B
Line freq. harmonics	EN61000-3-2	Complies
Voltage fluctuations	EN61000-3-3	Complies
ESD Contact	EN61000-4-2	6 kV contact
ESD Air	EN61000-4-2	8 kV air
Radiated immunity	EN61000-4-3	3 V/m
Fast Transients (EFT)	EN61000-4-4	2 kV/5 kHz
Line surge immunity	EN61000-4-5	1 kV diff /2 kV common mode
Conducted immunity	EN61000-4-6	3 Vrms
Power freq. mag. field	EN61000-4-8	3 A/m
Voltage dip immunity	EN61000-4-11	Consult Factory

Mechanical Notes

INPUT	J1 MOLEX 22-43-8040 PIN 1 AC LINE PIN 4 AC NEUTRAL SOLDER HOLE ON BOARD	
GROUND		
OUTPUT	J2 MOLEX 22-43-8040 PIN 1 OUTPUT 1 PIN 2 OUTPUT 1 PIN 3 COMMON PIN 4 COMMON	
MATING CONNECTOR (MOLEX)		
INPUT	HOUSING 50-37-5043	CONTACTS 08-70-1040
OUTPUT	HOUSING 50-37-5043	CONTACTS 08-70-1040



SL Power Electronics Corp • 6050 King Drive • Ventura, CA 93003 • Phone:805.486.4565 • Fax:805.487.8911 • Email:info@slpower.com • www.slpower.com

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