

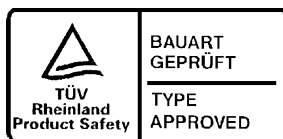


SPECIFICATION

For

SWITCHING POWER SUPPLY

M/N: MPE-902M





1.0 INTRODUCTIONS

MPE-902M is 20Watts, universal AC input switching power supply. This model has over-voltage crowbar protection in main output.

2.0 INPUT SPECIFICATIONS

2.1 Input Voltage

The range of input voltage is from 85VAC to 260VAC.

2.2 Input frequency

The range of input frequency is from 47Hz to 63Hz.

2.3 Input current

The maximum input current is 1A at 115V AC or 0.6A at 230VAC.

2.4 Inrush current

The inrush current will not exceed 20A at 115VAC input or 40A at 230VAC input, cold start, 25°C.

3.0 OUTPUT SPECIFICATIONS

3.1 Load range

Output voltage	Min. load	Rated load	Peak load	Voltage accuracy
+5V	0A	1.5A	2.5A	4.95V to 5.05V
+12V	0A	1A	1.5A	11.4V to 12.6V

At factory, both outputs in 60% rated load condition; the +5V output is set to between 4.95V and 5.05V, and +12V is checked to be within the specified voltage accuracy range.

3.2 Ripple and noise

The peak to peak ripple and noise is less than +/-1% of output voltage at rated load.

Measuring is done by 15MHz bandwidth limited oscilloscope and terminated the output with a 0.47μF capacitor.

3.3 Line regulation

The line regulation is less than +/-1% when measuring at rated load and +/-10% of input voltage changing.

3.4 Load regulation

The load regulation for +5V is less than +/-1%, for +12V is less than +/-4%, measuring is done by changing the output load +/-40% from 60% rated load, and keep the other output at 60% rated load.



4.0 GENERAL FEATURES

4.1 Efficiency

The efficiency is 75% typical while measuring at nominal line and rated load.

4.2 Hold up time

The hold up time is longer than 16mS at 115VAC input and rated load.

4.3 Protection

For some reasons the power supply might fail to control itself, the build-in over voltage protection circuit will shut down the outputs to prevent damaging external circuits. The trip point of crowbar circuit is around 5.7V to 6.7V. The power supply will go into hiccup mode against short circuit or over load conditions, and will auto-recovery while faulty conditions are removed.

5.0 ENVIRONMENT SPECIFICATIONS

5.1 Operating temperature

0 °C to 50°C

5.2 Storage temperature

-20°C to 85°C

5.3 Altitude

Will operate properly at any altitude between 0 to 10000 ft.

6.0 INTERNATIONAL STANDARDS

6.1 Safety standards

Designed to meet the following standards:

UL 1950 D3

CSA 22.2 No.234

EN 60950

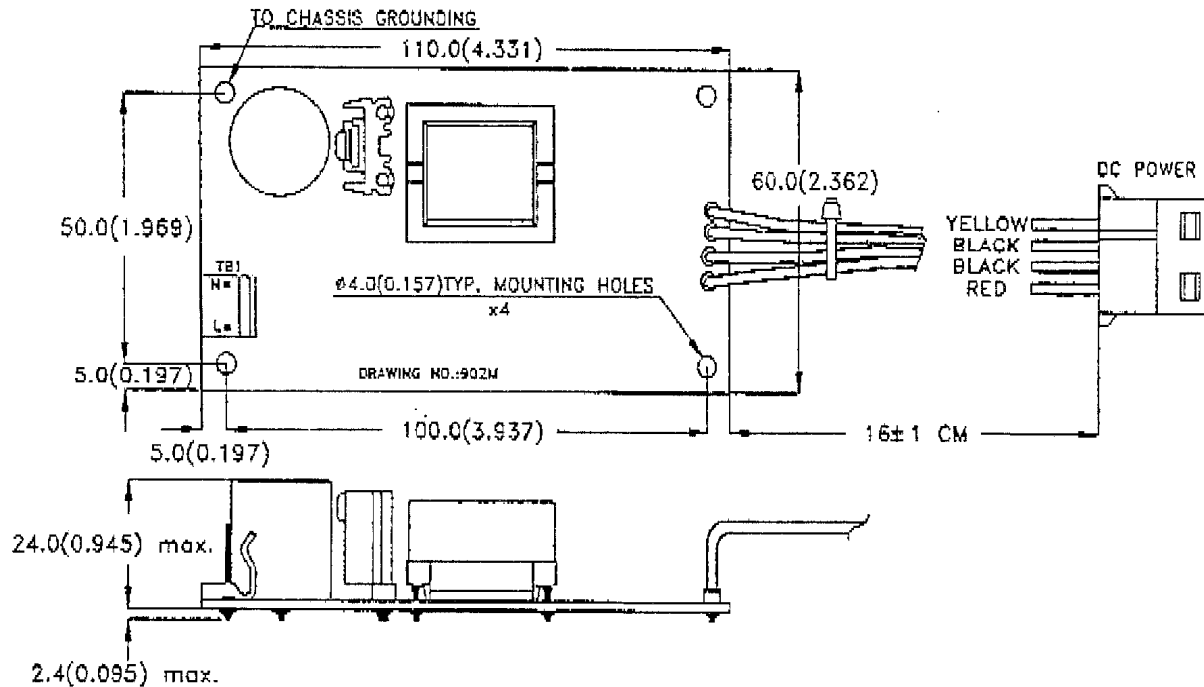
6.2 EMI standards

Designed to meet the following conducted limits:

FCC docket 20780 curve "B"



7.0 MECHANICAL SPECIFICATION



7.1 Dimensions

Dimensions are shown in mm (inch) as above. Tolerance specified is +/-0.4mm.

7.2 Connectors

TB1—AC input : Molex 5277-2 or equivalent.

TB2—DC output : AMP 1-480424-0 or equivalent.

7.3 Wire color vs. output voltage

Yellow - +12V

Red - +5V

Black - GND