



- **QUAD OUTPUT HIGH VOLTAGE POWER SUPPLY**
- **LOW COST, AIR INSULATED DESIGN**
- **SMT DESIGN—SMALL SIZE AND LOW WEIGHT**
- **ARC AND SHORT CIRCUIT PROTECTED**
- **REMOTE ENABLE CONTROL PROVIDED**
- **UL APPROVED TO UL61010-1**

Spellman's ML1350 power supply module has been designed specifically to drive quadrupoles used in mass spectrometry. This compact, low cost, SMT based high performance module is printed circuit board mountable. This quad output supply is ideal for quadrupole drivers and electrostatic lenses.

This voltage regulated, current limited, fixed quad output unit provides up to 15mA of load current from each output. The ML1350 is fully protected against arc and short circuit conditions. The grounded metal case provides both shielding and heat sinking functions. An Enable feature is provided, allowing simple remote operation of the supply. The ML1350 is CE and UL approved.

## TYPICAL APPLICATIONS

Quadrupole HVPS  
Electrostatic Lenses

## SPECIFICATIONS

### Input Voltage:

+24 Vdc,  $\pm 1.2$ Vdc

### Input Current:

$\leq 3.0$  amps

### Output Voltage:

Output 1-Positive:

+245 volts, fixed, accuracy  $< \pm 10\%$

Output 2-Negative:

-245 volts, fixed, accuracy  $< \pm 10\%$

Output 3-Positive:

+1350 volts, fixed, accuracy  $< \pm 7\%$

Output 4-Negative:

-1350 volts, fixed, accuracy  $< \pm 7\%$

### Output Current:

15mA maximum for each output

### Line Regulation: (typical)

$\pm 1$  volt all outputs

### Load Regulation: (typical)

$\pm 3\%$  all outputs

### Output Current Limit:

An auto-recovering short circuit fold back limit is employed. Fully arc protected, capable of 10 arcs in 5 seconds.

### Ripple:

$\leq 0.1\%$  p-p of full rated output voltage

### Stability:

$\leq 0.25\%$  per hour, constant operating conditions after 1 hour warm up.

### Under Voltage Shutdown:

The power supply will shut down when an input under voltage condition is detected. When the input voltage is restored above 11.8 volts, operating the enable pin will reset this fault.

### Temperature Coefficient:

$\leq 200$ ppm per degree C

### Environmental:

Temperature Range:

Operating:  $0^{\circ}\text{C}$  to  $50^{\circ}\text{C}$

Storage:  $-35^{\circ}\text{C}$  to  $85^{\circ}\text{C}$

Humidity:

10% to 90% RH, non-condensing

### Cooling:

Unit must be mounted in free air, in any position with the exception of inverted (pins up). Forced air cooling is recommended.

### Dimensions:

0.984" H X 4.331" W X 3.150" D (25mm x 110mm x 80mm)

Width does not include mounting tab

### Weight:

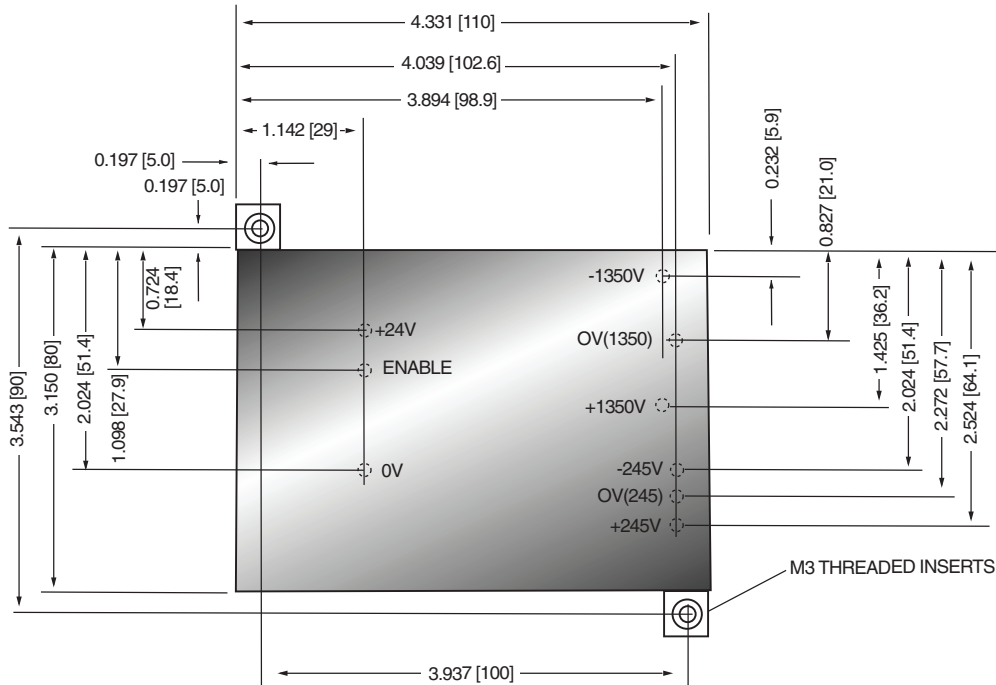
7.27 oz. (206g)

### Regulatory Approvals:

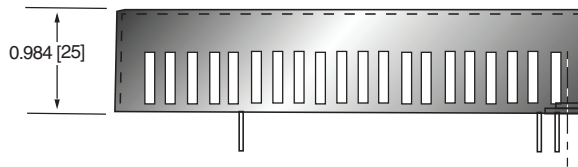
Compliant to 2004/108/EC, The EMC Directive and 2006/95/EC, The Low Voltage Directive, UL/CUL recognized file E227588.

DIMENSIONS: in.[mm]

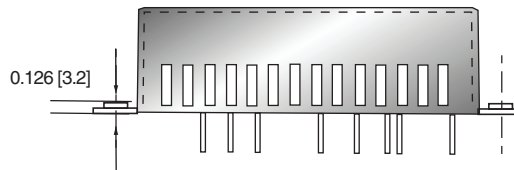
**TOP VIEW**



**FRONT VIEW**



**SIDE VIEW**



**How to Order:**  
PART NO.:ML1350P/N50/24

