



- **High Voltage Lens Power Supply**
- **Dual Positive and Negative Outputs**
- **Low Cost, Air Insulated Design**
- **SMT Design—Small Size and Low Weight**
- **UL Approved to UL61010-1**
- **Arc and Short Circuit Protected**
- **Remote Enable Control Provided**

Spellman's ML430 power supply module has been designed specifically to drive high voltage amplifiers. This compact, low cost, SMT based high performance module is printed circuit board mountable. Its dual output is ideal for amplifier driver requirements together with electrostatic lenses, deflectors and biasing supplies.

This voltage regulated, current limited, fixed, dual output unit provides up to 25mA of load current. The ML430 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.

## TYPICAL APPLICATIONS

High Voltage Amplifiers  
Electrostatic Lenses

## SPECIFICATIONS

### Input Voltage:

+24 Vdc,  $\pm 1.2$ Vdc

### Input Current:

$\leq 1.2$  amp

### Output Voltage:

Output 1-Positive:

+430 volts fixed. Accuracy  $\pm 7\%$

Output 2-Negative:

-430 volts fixed. Accuracy  $\pm 7\%$

Accuracy specified over full temperature, input voltage and load ranges

### Output Current:

12mA maximum – Output 1-Positive

25mA maximum – Output 2-Negative

### Line Regulation: (typical)

$\pm 0.1\%$  – Positive output  
 $\pm 1.0\%$  – Negative output

### Load/Cross Regulation: (typical)

$\pm 0.1\%$  – Positive output  
 $\pm 3.5\%$  – Negative output

### Output Current Limit:

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

### Ripple:

$\leq 0.5\%$  p-p of full rated output voltage

### Stability:

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

### 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 2.362" W X 2.362" D (25mm x 60mm x 60mm)

### Weight:

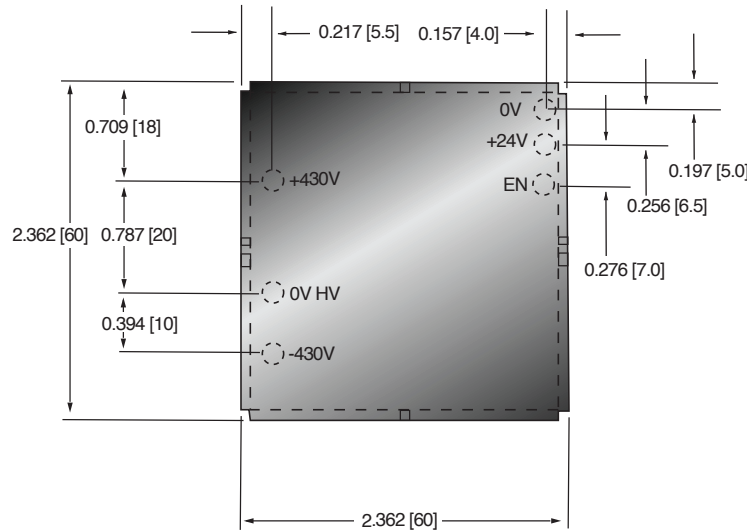
3.31 oz. (94g)

### Regulatory Approvals:

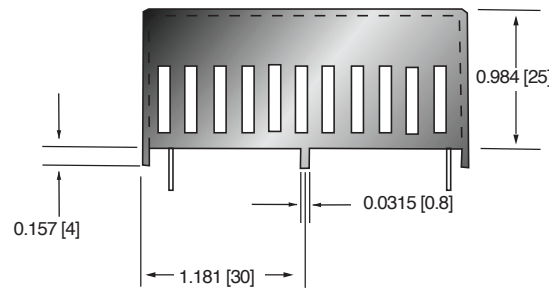
Compliant to EEC EMC Directive. Compliant to EEC Low Voltage Directive. UL/CUL recognized file E227588 & E354595. RoHS compliant.

DIMENSIONS: in.[mm]

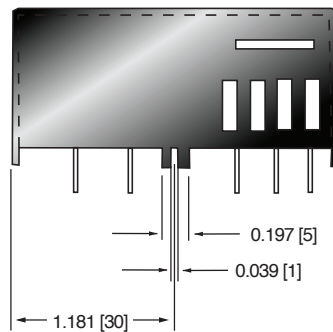
**TOP VIEW**



**FRONT VIEW**



**SIDE VIEW**



**How to Order:**

PART NO.: ML430P/N16/24

