



Spellman's MS Modules have been designed for printed circuit board mounting with high reliability, small size and light weight. Each module provides 3W of output power to 3kV with well regulated low ripple, high stability and high voltage in a versatile, compact cost-effective design. The modules incorporate remote control and arc & short-circuit protection. Radiated pickup is eliminated by sealing each module in an aluminum enclosure.

TYPICAL APPLICATIONS

Photomultiplier Tubes
Precision Lenses
Image Intensifiers
Nuclear Instruments
Spectroscopy

OPTIONS

- I Isolated Input to Output
Isolation Voltage: 40V for units up to 1kV
100V for units >1kV

SPECIFICATIONS

Input Voltage:

+12Vdc \pm 1V. Other input voltages also available.

Input Current:

< 0.56A at full output.

Output Voltage:

Continuously adjustable over each entire range
Models available in either positive or negative polarity.
See table for voltage ranges.

- **Low Cost**
- **Output Voltages up to 3kV**
- **3 Watts Power Rating**
- **Positive or Negative Polarity**
- **Arc and Continuous Short Circuit Protected**
- **Low Stored Energy**
- **High Reliability**
- **Internal 5V Reference**
- **OEM Customization Available**

Line Regulation:

< 0.005% for input change of 1V

Load Regulation:

< 0.05% for 100 μ A to full load change. (at max. voltage)

Output Voltage Control:

Remote voltage programming such that 0-5Vdc gives 0 to full rated output

Output Power: 3W continuous.

Voltage Regulation:

Line: 0.005% for input change of 1V
Load: 0.05% for 100 μ A to full load change at maximum voltage.

Ripple: < 0.01% p-p of full output voltage.

5Vdc Reference: +5.0V (\pm 0.2V)

A maximum of 1mA can be drawn from this output.

Temperature:

Operating: 0°C to +50°C.
Storage: -35°C to +85°C.

Temperature Coefficient: 50ppm/°C typical.

Stability:

< 0.05%/8 hrs at constant operating conditions after one hour warm-up.

Humidity: 0 to 90% non-condensing.

Dimensions:

Up to 1000Vdc:
.87"H x 2.1"W x 3.1"D (23mm x 53mm x 78mm).
1000V to 3000Vdc:
1.1"H x 2.36"W x 4.2"D (28mm x 60mm x 106mm).

Weight:

Up to 1000V: 0.2lb (80g).
Over 1000V: 0.4lb (160g).

Regulatory Approvals:

Compliant to EEC EMC Directive. Compliant to EEC Low Voltage Directive. RoHS compliant.

MS SELECTION TABLE

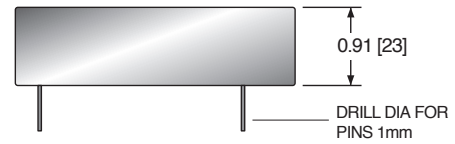
OUTPUT VOLTAGE (V)	OUTPUT CURRENT (mA)	RIPPLE V (p-p)	MODEL
300	10	0.03	MS0.3*
500	6	0.05	MS0.5*
750	4	0.075	MS0.75*
1000	3	0.10	MS1*
1500	2	0.15	MS1.5*
2000	1.5	0.20	MS2*
2500	1.2	0.25	MS2.5*
3000	1	0.30	MS3*

*Specify "P" for positive polarity or "N" for negative polarity.

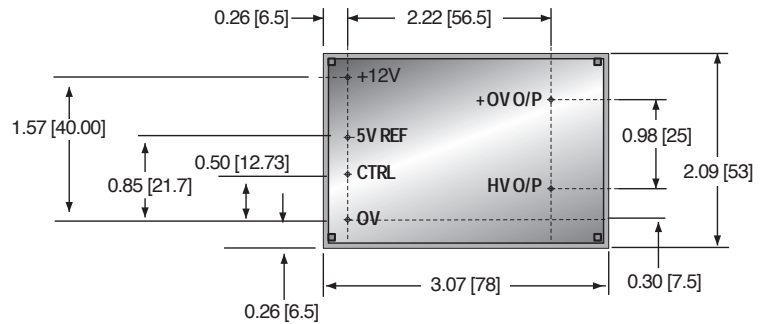
DIMENSIONS: in.[mm]

UNIT UP TO 1000V

SIDE VIEW

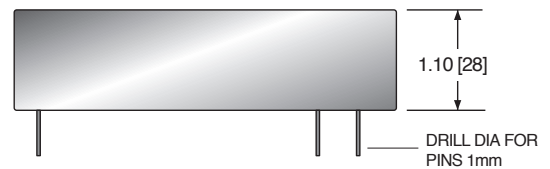


BOTTOM VIEW

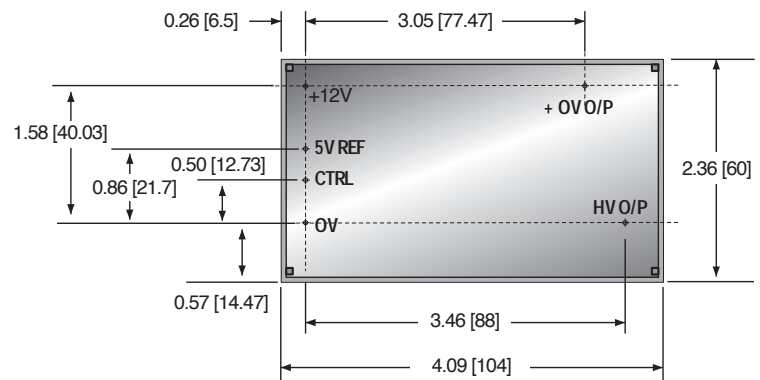


UNIT > 1000V UP TO 3000V

SIDE VIEW



BOTTOM VIEW



View on pins.
Recommended hole size
for terminals 1mm.

