

- **LOW COST, SMALL SIZE**
- **INPUT/OUTPUT FLOATING**
- **HIGH INPUT/OUTPUT ISOLATION**
- **SHORT-CIRCUIT AND REVERSE POLARITY PROTECTED**
- **OEM CUSTOMIZATION AVAILABLE**

Spellman's MD Series high voltage power supply modules are low cost, general purpose dc to dc converters designed for direct PCB mounting with output voltages to 3kV. The output voltage is proportional to the input voltage over the range of 10% to 100%. The modules are short-circuit and reverse polarity protected. High reliability is designed into a compact and lightweight modular block intended for customer designed products at power levels of 1.5W with output voltage isolation providing reverse polarity. A shielded (screen) option is available. The modules are fully encapsulated.

MD SELECTION TABLE

OUTPUT VOLTAGE RANGE	OUTPUT CURRENT mA max	MODEL
50 to 500	3	MD0.5PN
150 to 1500	1	MD1.5PN
300 to 3000	0.5	MD3.0PN
170 to 500	3	MDA0.5PN
500 to 1500	1	MDA1.5PN
1000 to 3000	0.5	MDA3.0PN

TYPICAL APPLICATIONS

- | | |
|-----------------------|---------------------|
| Photomultiplier Tubes | Precision Lenses |
| Image Intensifiers | Ionization Chambers |
| Geiger Counters | Ink Jet Printers |
| Gas Chromatography | |

SPECIFICATIONS

Input Voltage:

1.75V to 12Vdc - Model MD
5V to 12Vdc - Model MDA

Input Current:

< 200mA (typical) at full output.

Output Voltages & Currents:

Voltage ranges between 50V and 3kV are available. The output voltage is proportional to the input voltage over the range 10% to 100%.

Output Power:

1.5W maximum.

Ripple:

Less than 0.5% p-p of full output voltage.

Module Efficiency:

55% to 70% typ.

Temperature:

Operating: 0°C to +65°C.
Storage: -35°C to +85°C.

Humidity:

0 to 90%, non-condensing.

Insulation Strength:

3kV Input/Output.

MTBF:

>100,000 Hours

Terminations:

4PC pins: 0.394" (1mm) diameter.

PCB plated through holes:

0.043" (1.1mm); 4 required.

Dimensions:

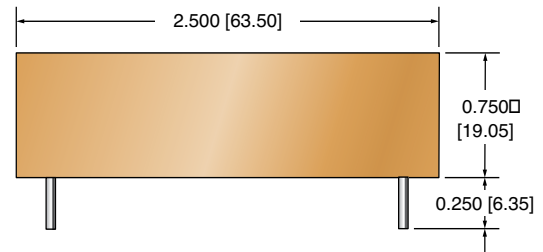
0.75"H x 2.5"W x 1.5"D (19mm x 63.5mm x 38.1mm).

Weight:

3oz (85gm).

DIMENSIONS: in.[mm]

SIDE VIEW



BOTTOM VIEW

