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.

**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).

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