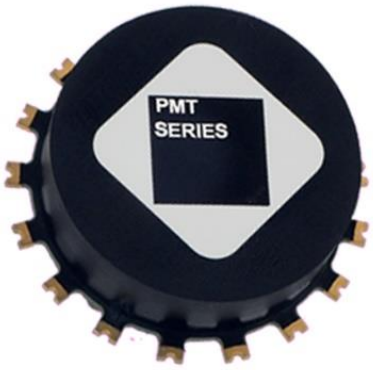
HVM TECHNOLOGY
Innovative High Voltage Products



PMT Series

Integrated High Voltage Power Supply with Active Divider and Pre-Amplifier

Features

- ***Easy to Use, No External Components Required***
- ***Wide Input Voltage Range (5V - 24V)***
- ***Internal High Voltage Generator***
- ***High Voltage Monitoring***
- ***Positive or Negative Models Available***
- ***Active Voltage Divider for up to 8 Dynodes***
- ***Dual Internal Pre-Amp (AC and DC)***
- ***Full Encapsulation Protection***
- ***Operating Temperature Range (-40°C to +60°C)***

RoHS

Description

The **PMT Series** is a fully integrated module for use with a wide variety of photomultiplier tubes. Designed for ease of use, the **PMT Series** contains an adjustable high voltage generator, active transistorized divider and pre-amp in a space-saving (1.55”D x 0.48”H) package.

The **PMT Series** operates from a wide input voltage range (5V up to 24V). The output voltage at the top of the divider is independent of input power voltage and is proportional to the programming voltage (0 to 5V produces full scale output) and features excellent linearity. The **PMT Series** also has voltage monitoring available. Models are available in positive or negative polarity for any number of PMT dynodes up to 8.

HVM’s proprietary, ultra-compact resonant converter design minimizes quiescent current and operating noise while delivering maximum performance and reliability.

Typical applications for this module include photomultiplier tubes for detection and scintillation counters.

Mechanical Characteristics

- **Packaging:** Encapsulated in high performance epoxy
- **Case Materials:** Thermoset Plastic (Diallyl Phthalate)

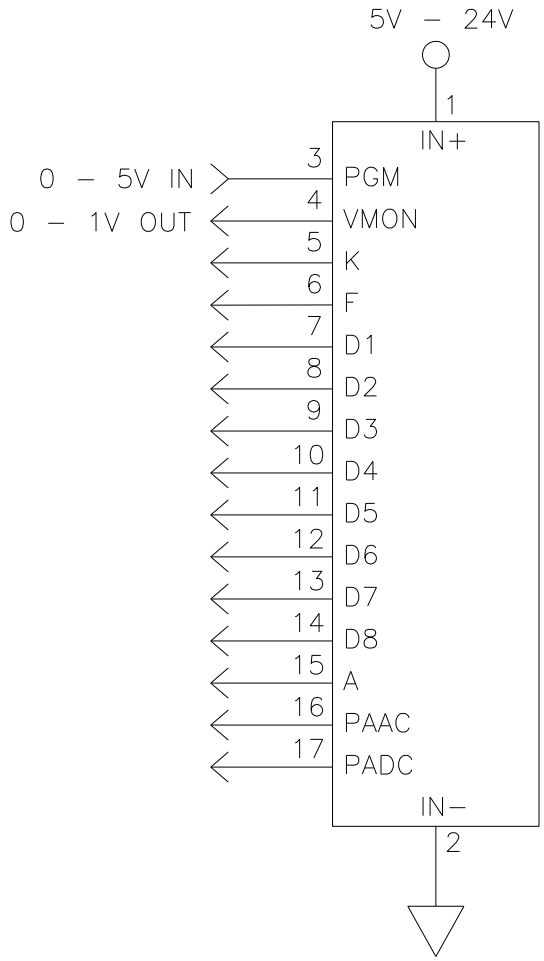
Environmental Characteristics

- **Operating Temp Range:** -40ºC to +60ºC
- **Storage Temp Range:** -55ºC to +85ºC

HVM TECHNOLOGY, INC., 360 McKenna Ave, New Braunfels, TX 78130
Tel: (830) 626-5552 / http://www.hvmtech.com/ email: sales@hvmtech.com

www.hvmtech.com

APPLICATION SCHEMATIC

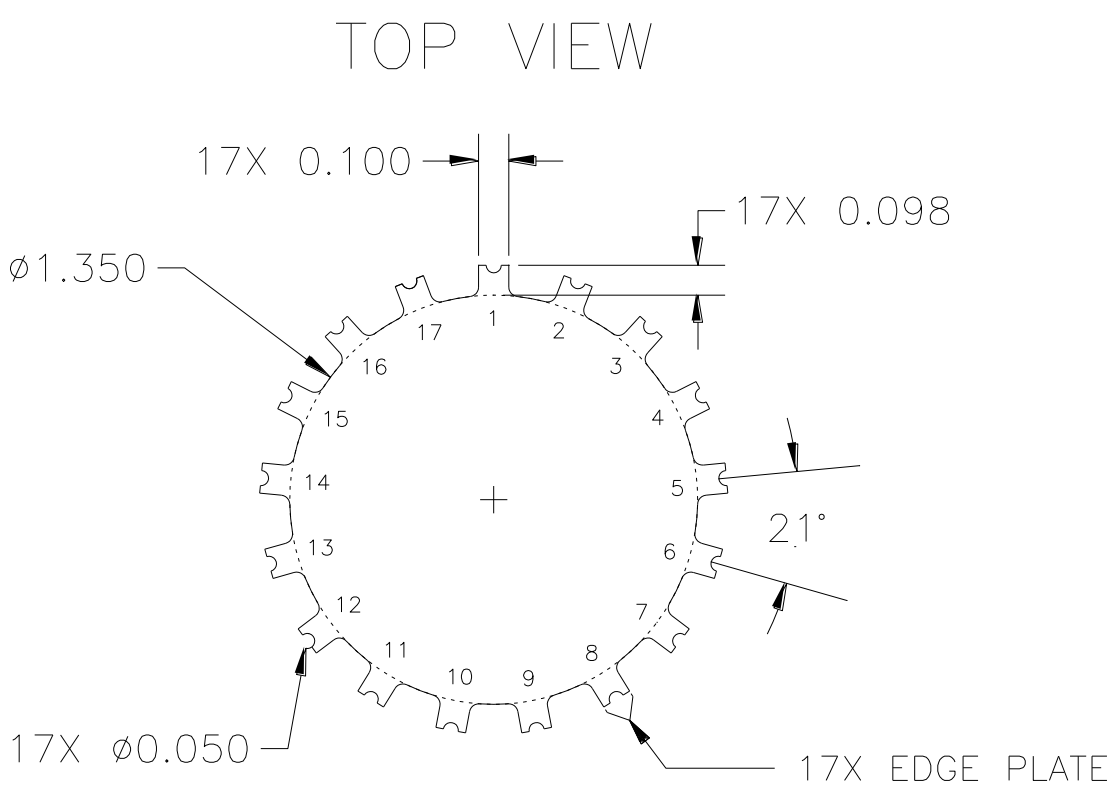


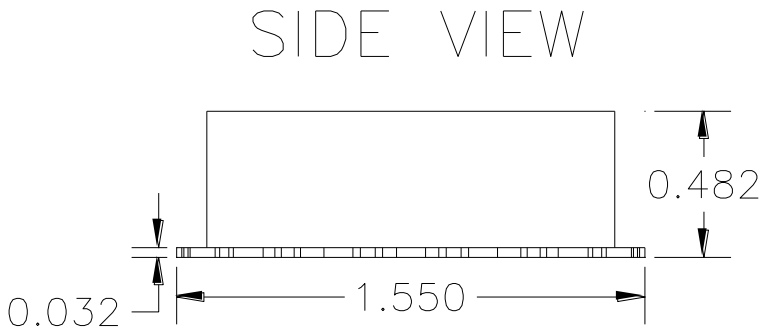
ELECTRICAL CHARACTERISTICS

Input Voltage (IN+)	5VDC – 24VDC
High Voltage Output	Adjustable up to 2kV (positive or negative model available)
Output Tolerance	± 5%
Programming Voltage (PGM)	0 to 5V produces 0V to Full Scale Output Voltage
AC Preamp (PAAC)	Indicates current spikes through divider
DC Preamp (PADC)	0 to 1V output indicates 0 to max output current draw
Voltage Monitor (VMON)	0 to 1V output indicates 0 to max output voltage present
Output Ripple at Full Load	<50mVppk
Oscillator Frequency	30kHz to 100kHz

HVM TECHNOLOGY, INC., 360 McKenna Ave, New Braunfels, TX 78130
Tel: (830) 626-5552 / http://www.hvmtech.com/ email: sales@hvmtech.com

DIMENSIONS





HVM TECHNOLOGY, INC., 360 McKenna Ave, New Braunfels, TX 78130
Tel: (830) 626-5552 / http://www.hvmtech.com/ email: sales@hvmtech.com

Pin Assignment	
1	(IN+) Power Input
2	(IN-) Power Return
3	(PGM) Voltage Program Input
4	(VMON) Voltage Monitor Output
5	(K) Cathode Output
6	(F) Focus Electrode Output
7	(D1) Dynode 1 Output
8	(D2) Dynode 2 Output
9	(D3) Dynode 3 Output
10	(D4) Dynode 4 Output
11	(D5) Dynode 5 Output
12	(D6) Dynode 6 Output
13	(D7) Dynode 7 Output
14	(D8) Dynode 8 Output
15	(A) Anode Output
16	(PAAC) AC Preamp Output
17	(PADC) DC Preamp Output