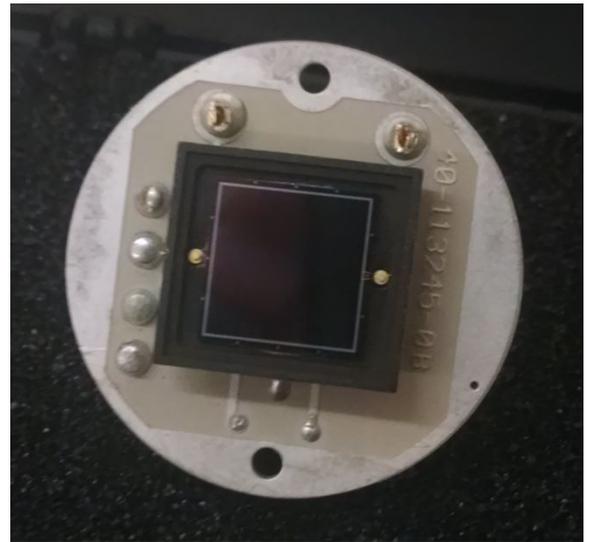


## Current to Voltage Convertor Amplifier for Operation in Vacuum

The new Model 671MX preamplifier is a very stable and low noise tool for converting current from Silicon photodiode detectors to a programmed output voltage. It has an integral socket to mount a McPherson VUV photodiode. They are used for the detection of UV, EUV and x-ray (wavelength range 1100 nm to .124 nm, energy range 1.13 eV to 1 keV) photons. Unlike common p-n junction diodes, the photodiodes do not have a dead region and have zero surface recombination. These devices detect the complete photon spectral range (0.0124 nm to 1100 nm) because of their extremely thin oxide window and 100% internal quantum efficiency.



The 671MX is especially for use in a high vacuum environment. The circuit board is high grade ceramic and uses all vacuum compatible components.

The 671MX comes with three resistors to adjust the gain. The user sets the gain by removing the previous resistor and replacing it with one of the other resistors. Other resistors are available upon request. It is important to note, some resistors are special order and have significant lead times.

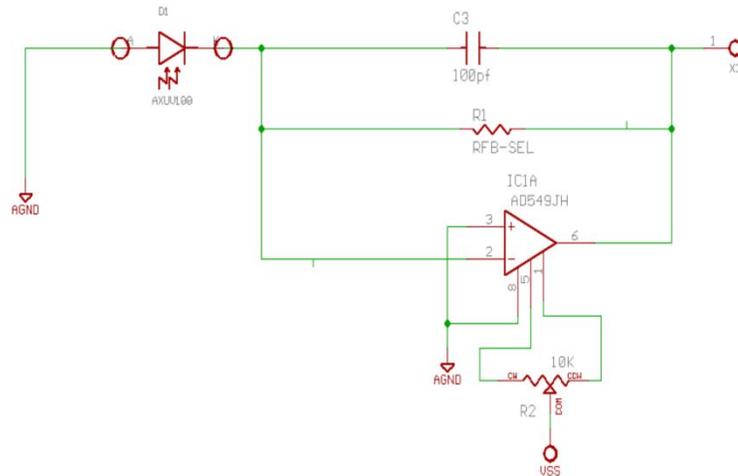
### Programmable Gain | Lower Noise | Vacuum Safe | Connection Pins Included

Power Input	+15 / -15 VDC
Maximum Current Input	10 $\mu$ amps
Min / Max Operating Temperature	0° / 70° C
Vacuum Operation	5 X 10e-6 Torr
Offset Drift	20 $\mu$ volts / °C
Dimensions (inches)	1.25 inch Diameter
Weight without power supply (pounds)	< 0.25

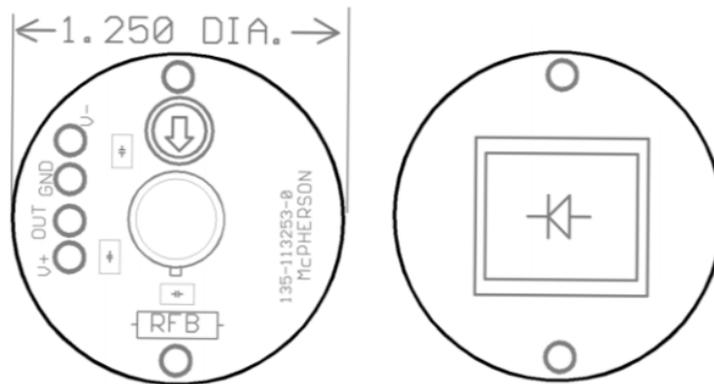
Conversion Settings with 1 micro amp Input*		
200,000 gain	200K feedback resistor value	200 milli Volts
1,000,000 gain	1M feedback resistor value	1 Volt
10,000,000 gain	10M feedback resistor value	10 Volt

\* settings require only the provided resistors, contact McPherson if others are required

## Circuit Diagram



## Amplifier Layout



## Power Supply Specifications

AC Power Input 100 – 240 VAC, 25 Watts

+15 VDC Current Out, Max. 0.50 Amps

-15 VDC Current Out, Max. 0.30 Amps

Universal input +/- 15 VDC Power Supply available, please inquire

## Ordering

Model 671MX

Part Number 135-113253-0