

# Phresh Photonics SiQu50-TIA

## Hybrid Quadrant Photodiode Amplifier

### Phresh Photonics SiQu50-TIA

is a hybrid of a Silicon Quadrant Photodiode combined with four high speed, low noise Trans-Impedance Amplifiers (TIA) all in a small footprint package. This module can be used to very accurately determine the location and position of a light beam and its movement.

Alternative versions of this Quadrant Photodiode Amplifier with smaller / UV enhanced quads are also available as well as custom configurations. Also available is a Dual Power-Supply version!

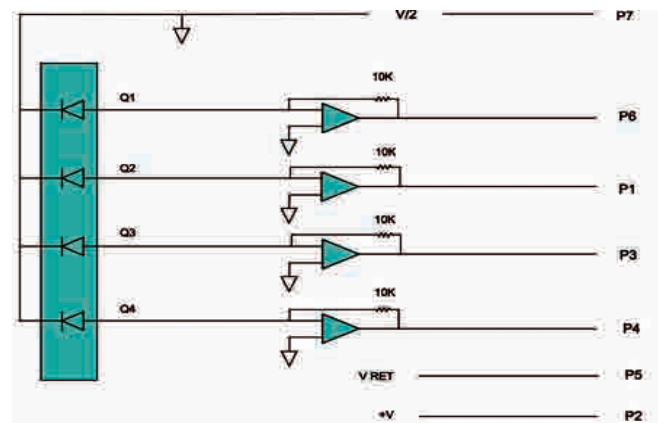
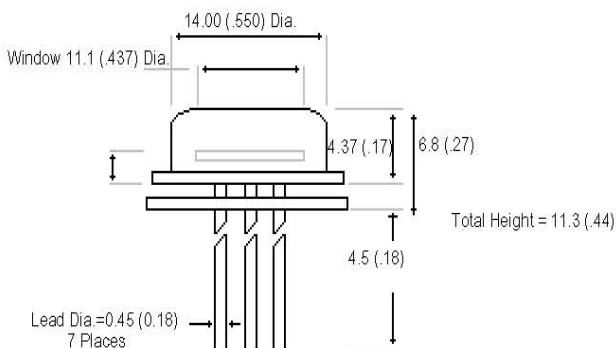
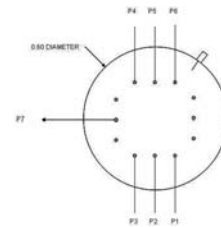
Typical applications include laser beam alignment (including in a feedback loop) and target acquisition.

#### Specifications:

Total Sensing Area	50mm <sup>2</sup> / 8mm <sup>Ø</sup>
Spectral Response	400-1100nm
Supply Voltage	+ 3- 18 (15V typ)
TransImpedance Gain	10KΩ
Bandwidth	1MHz
Responsivity (@ 900nm)	5.4V/μW
Minimum Power Level (quadrant)	.5μW
Saturation Level (quadrant)	500μW
Operating Temperature	0-70°C

#### Outputs:

The SiQu50-TIA requires an applied voltage of +3 to +18V. The outputs are the current generated by the photodiode elements after amplification through a current to voltage amplifier of 10,000 (10<sup>4</sup>). A pin is provided for each quadrant's amplified output.



#### Phresh Photonics

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