# <2GHz Amplified Photodetectors

EOT's <2GHz Amplified Photodetectors contain PIN photodiodes that utilize the photovoltaic effect to convert optical power into an electrical current and a fixed gain transimpedance amplifier allowing measurement of <1mW input powers. When terminated into 50Ω into an oscilloscope, the pulsewidth of a laser can be measured. When terminated into 50Ω into a spectrum analyzer, the frequency response of a laser can be measured. EOT's <2GHz Amplified Photodetectors come with their own wall plug-in power supply. Plugging a coaxial cable into the photodetector's BNC output connector and terminating into 50Ω at the oscilloscope or spectrum analyzer is all that is required for operation.


## Applications:

- Monitoring high repetition rate, externally modulated CW lasers
- Viewing <1mW laser powers

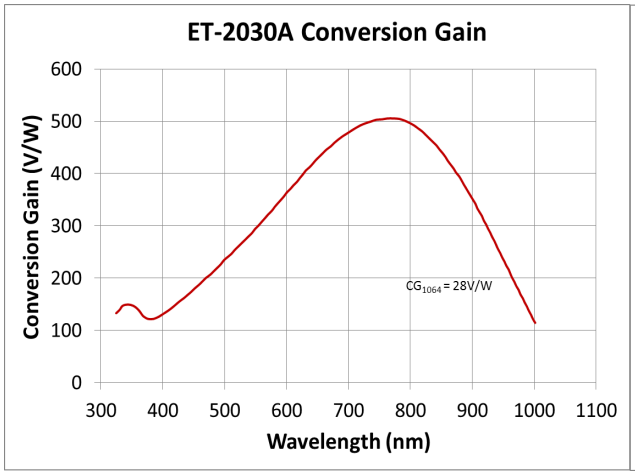
## Features:

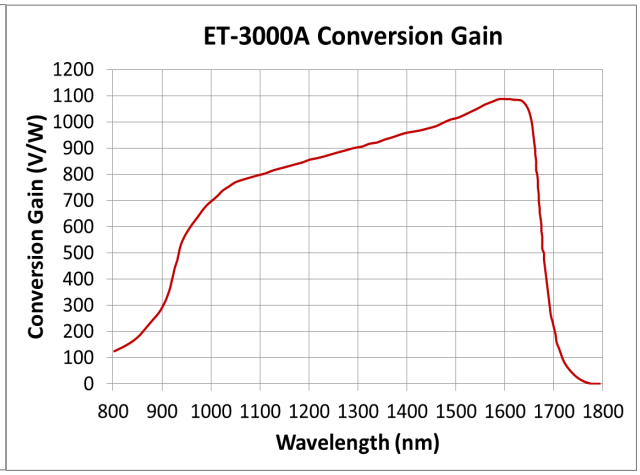
- Built-in transimpedance amplifier

## Specifications[a,b]:

| Part No. (Model) | 120-10013-0001 (ET-2030A) | 120-10036-0001 (ET-3000A) |
|---|---|---|
| **Detector Material** | Silicon | InGaAs |
| **Rise Time/Fall Time** | <500ps/<500ps | <400ps/<400ps |
| **Conversion Gain** | 450V/W at 830nm | 900V/W at 1300nm |
| **Power Supply** | 24VDC | 24VDC |
| **Bandwidth** | 30kHz—1.2GHz | 30kHz—1.5GHz |
| **Active Area Diameter** | 400µm | 100µm |
| **Acceptance Angle (1/2 angle)** | 10° | 20° |
| **Noise Equivalent Power** | <60pW/√Hz | <30pW/√Hz |
| **Maximum Linear Rating** | 1.3V peak | 1.3V peak |
| **Mounting (Tapped Holes)** | 8-32 or M4 | 8-32 or M4 |
| **Output Connector** | BNC | BNC |

[a] Product specifications are subject to change.
[b] Not suitable for CW applications
Note: RoHS compliant with exception.

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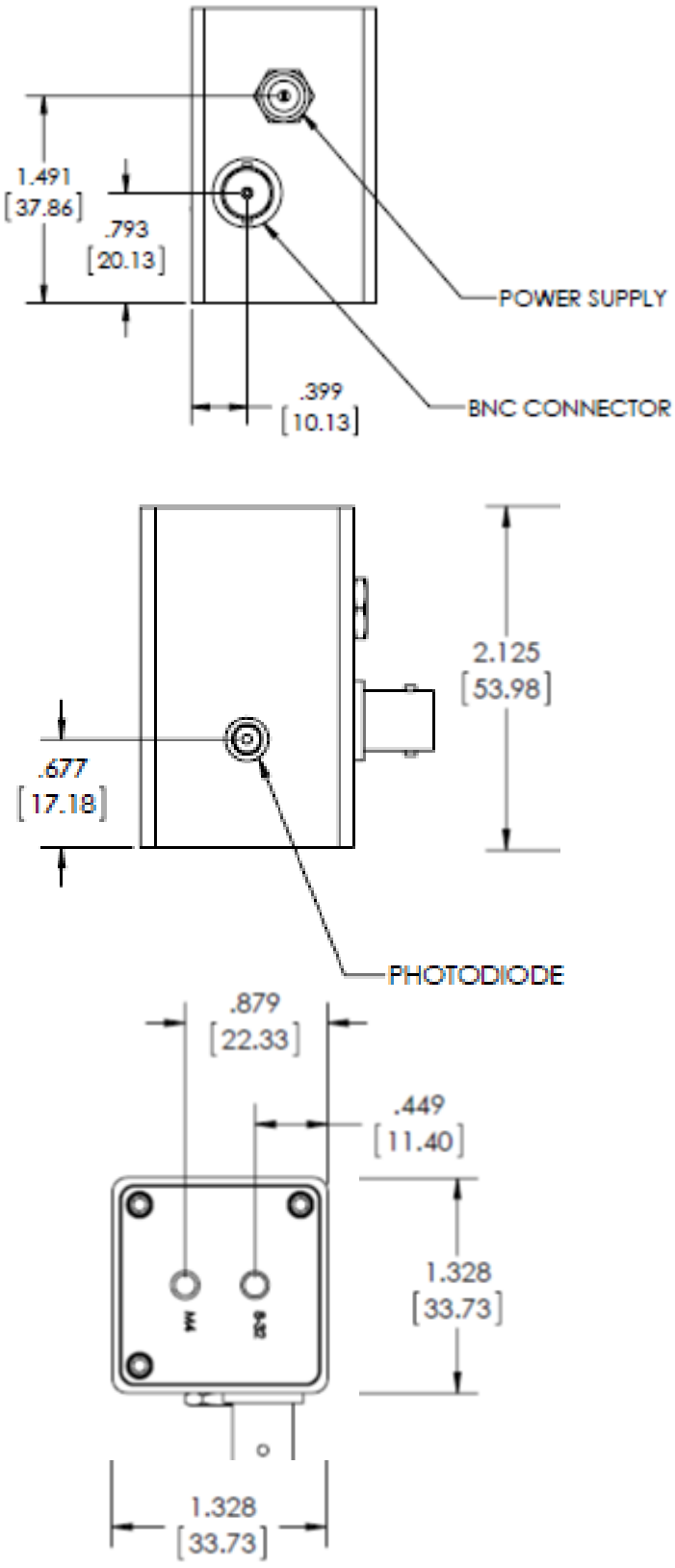
(06/18/2015)

## ET-2030A, 3000A Dimensions[a]:


[a] All dimensions in inches

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