

>12.5GHz 2μm InGaAs Photodetectors

EOT's >12.5GHz 2μm InGaAs Photodetectors contain PIN photodiodes that utilize the photovoltaic effect to convert optical power into an electrical current. 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 >12.5GHz 2μm InGaAs Photodetectors come with their own internal bias supply consisting of long-life lithium cells. Plugging a coaxial cable into the photodetector's SMA output connector and terminating into 50Ω at the oscilloscope or spectrum analyzer is all that is required for operation.



Applications:

- Monitoring the output of Q-switched lasers
- Monitoring the output of mode-locked lasers
- Monitoring the output of externally modulated CW lasers
- Time domain and frequency response measurements

Features:

- >12.5GHz 2μm InGaAs Photodetectors can be ordered with optional wall plug-in power supply

Specifications^{a,b}:

Part No. (Model)	120-10105-0001 (ET-5000)	120-10104-0001 (ET-5000F)
Rise Time/Fall Time	28ps/28ps	28ps/28ps
Responsivity ^c	1.3A/W at 2000nm	0.95A/W at 2000nm
Power Supply	3V	3V
Bandwidth	>12.5GHz	>12.5GHz
Active Area Diameter	40μm	40μm
Dark Current	<1μA	<1μA
Acceptance Angle (1/2 angle)	20°	N/A
Noise Equivalent Power ^d	15pW/√Hz at 2000nm	20pW/√Hz at 2000nm
Maximum Linear Rating CW	3mA	3mA
Mounting (Tapped Holes)	8-32 or M4	8-32 or M4
Output Connector	SMA	SMA
Fiber Optic Connection ^e	N/A	FC/UPC

^a Product specifications are subject to change.

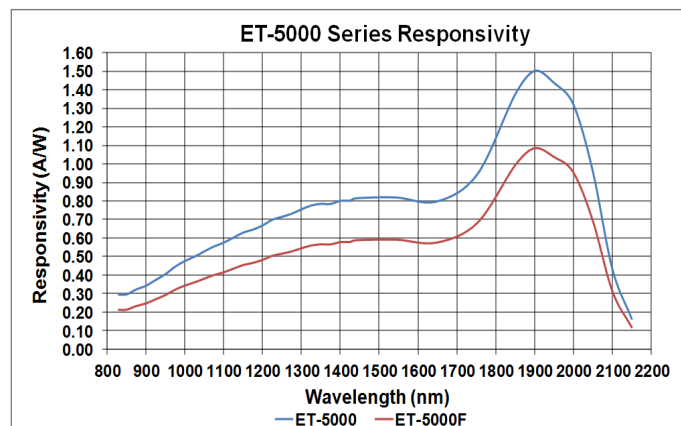
^b All specifications apply for a 50Ω termination unless otherwise noted.

^c Photodetectors have an internal 50Ω termination. Responsivity data applicable to diode only. Detector output should be based on 1/2 the responsivity of that shown on graph.

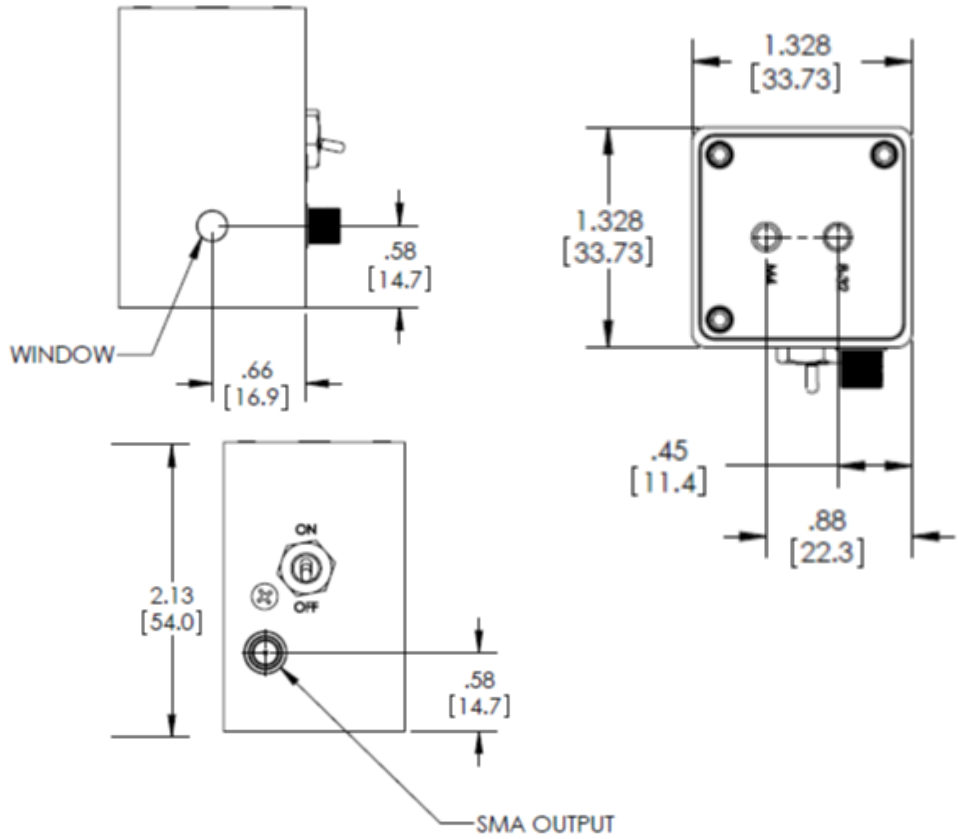
^d Noise Equivalent Power (NEP) is determined via open circuit output.

^e Multi-mode fiber available. May limit bandwidth.

Note: All products are RoHS compliant.

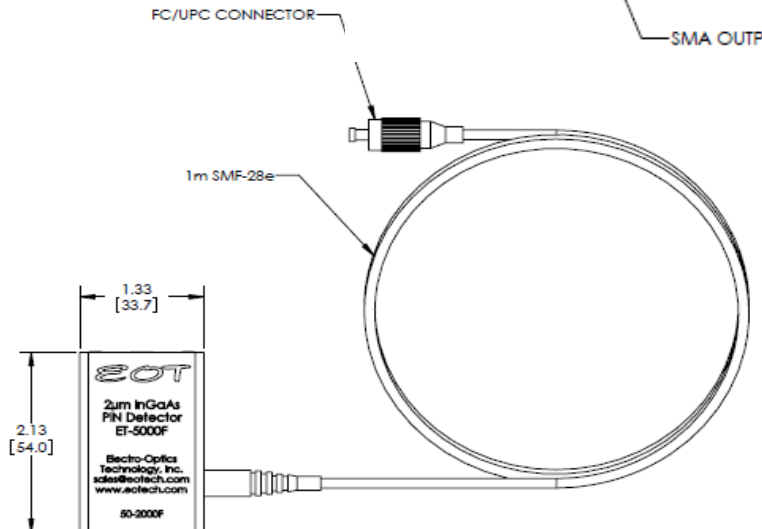
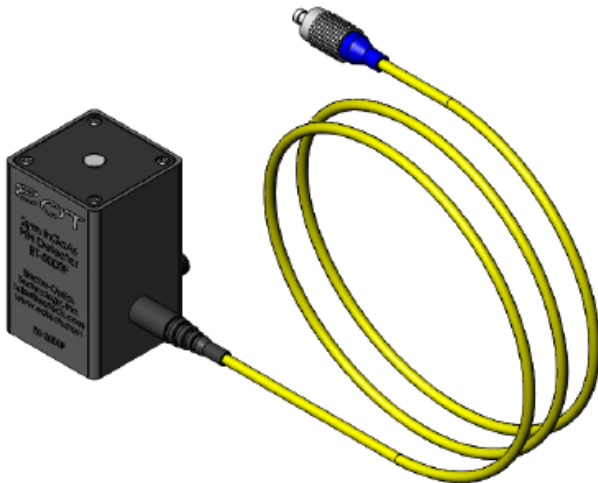
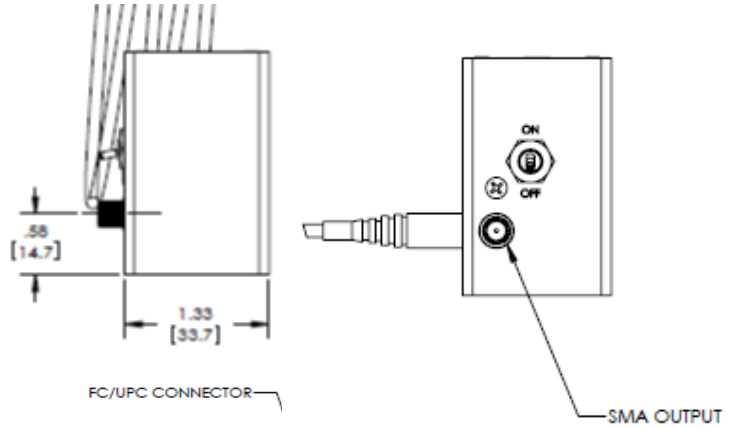
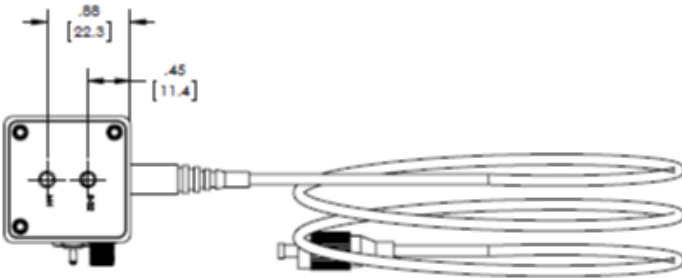


ET-5000 Dimensions[∘]:



[∘] All dimensions in inches

ET-5000F Dimensions[∘]:



[∘] All dimensions in inches