

EOT's >9GHz 2µm Amplified InGaAs 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 500 into an oscilloscope, the pulsewidth of a laser can be measured. When terminated into 500 into a spectrum analyzer, the frequency response of a laser can be measured. EOT's >9GHz 2µm Amplified InGaAs Photodetectors come with their own wall plug-in power supply. Plugging a coaxial cable into the photodetector's BNC output connector and terminating into 500 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)	120-10115-0001	120-10116-0001
	(ET-5000A)	(ET-5000AF)
Rise Time/Fall Time	40ps/40ps	40ps/40ps
Conversion Gain	1300V/W at 2000nm	950V/W at 2000nm
Power Supply	5VDC	5VDC
Bandwidth	20kHz–9GHz	20kHz–9GHz
Active Area Diameter	40μm	40μm
Acceptance Angle (1/2 angle)	20°	N/A
Noise Equivalent Power ^c	<17pW/√Hz at 2000nm	<17pW/√Hz at 2000nm
Maximum Linear Rating	450mVp-p	450mVp-p
Mounting (Tapped Holes)	8-32 or M4	8-32 or M4
Output Connector	SMA	SMA
Fiber Optic Connection ^d	N/A	FC/UPC

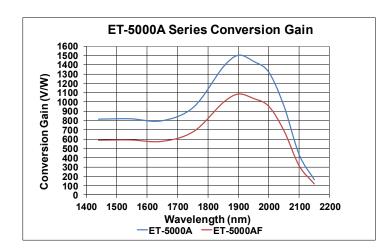
^a Product specifications are subject to change.

 $^{\text{b}}$ All specifications apply for a 50 Ω termination unless otherwise noted.

^c Noise Equivalent Power (NEP) is determined via short circuit output.

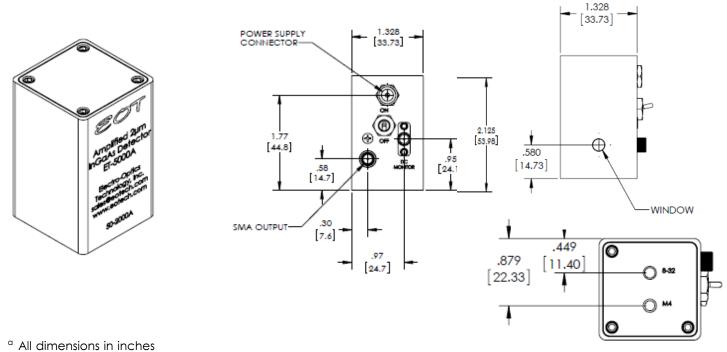
^d Multi-mode fiber available. May limit bandwidth.

Note: All products are RoHS compliant.





ET-5000A Dimensions^a:



ET-5000AF Dimensions^a: OWER CONNECTOR OH C 0 . ŧ 44.96 .950 0 24.13 .580 [14.73] .305 [7.75] SMA CONNECTOR .973 24.71 г 1.328 o 33.73 2.125 53.98 .449 11.40 ^a All dimensions in inches .879 22.33

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