

>9GHz Amplified Photodetectors

EOT's >9GHz 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 >9GHz 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

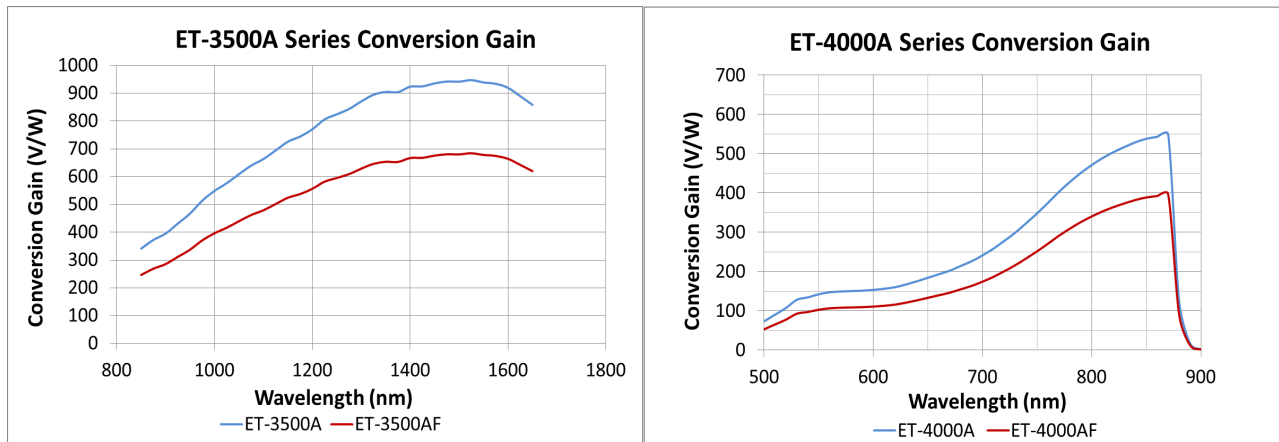
Specifications^{a,b}:

Part No. (Model)	120-10060-0001 (ET-3500A)	120-10064-0001 (ET-3500AF)	120-10073-0001 (ET-4000A)	120-10077-0001 (ET-4000AF)
Detector Material	InGaAs	InGaAs	GaAs	GaAs
Rise Time/Fall Time	<40ps/<40ps	<40ps/<40ps	<40ps/<40ps	<40ps/<40ps
Conversion Gain	>900V/W at 1300nm	>650V/W at 1300nm	530V/W at 830nm	380V/W at 830nm
Power Supply	5VDC	5VDC	5VDC	5VDC
Bandwidth	20kHz-9GHz	20kHz-9GHz	20kHz-9GHz	20kHz-9GHz
Active Area Diameter	32μm	32μm	60μm	60μm
Acceptance Angle (1/2 angle)	15°	N/A	15°	N/A
Noise Equivalent Power	<25pW/√Hz	<25pW/√Hz	<45pW/√Hz	<45pW/√Hz
Maximum Linear Current	225μA	225μA	225μA	225μA
Current Monitor Output	1mV/μA	1mV/μA	1mV/μA	1mV/μA
Maximum Linear Rating	450mVp-p	450mVp-p	450mVp-p	450mVp-p
Mounting (Tapped Holes)	8-32 or M4	8-32 or M4	8-32 or M4	8-32 or M4
Output Connector	SMA	SMA	SMA	SMA
Fiber Optic Connection	N/A	FC/UPC	N/A	FC/UPC

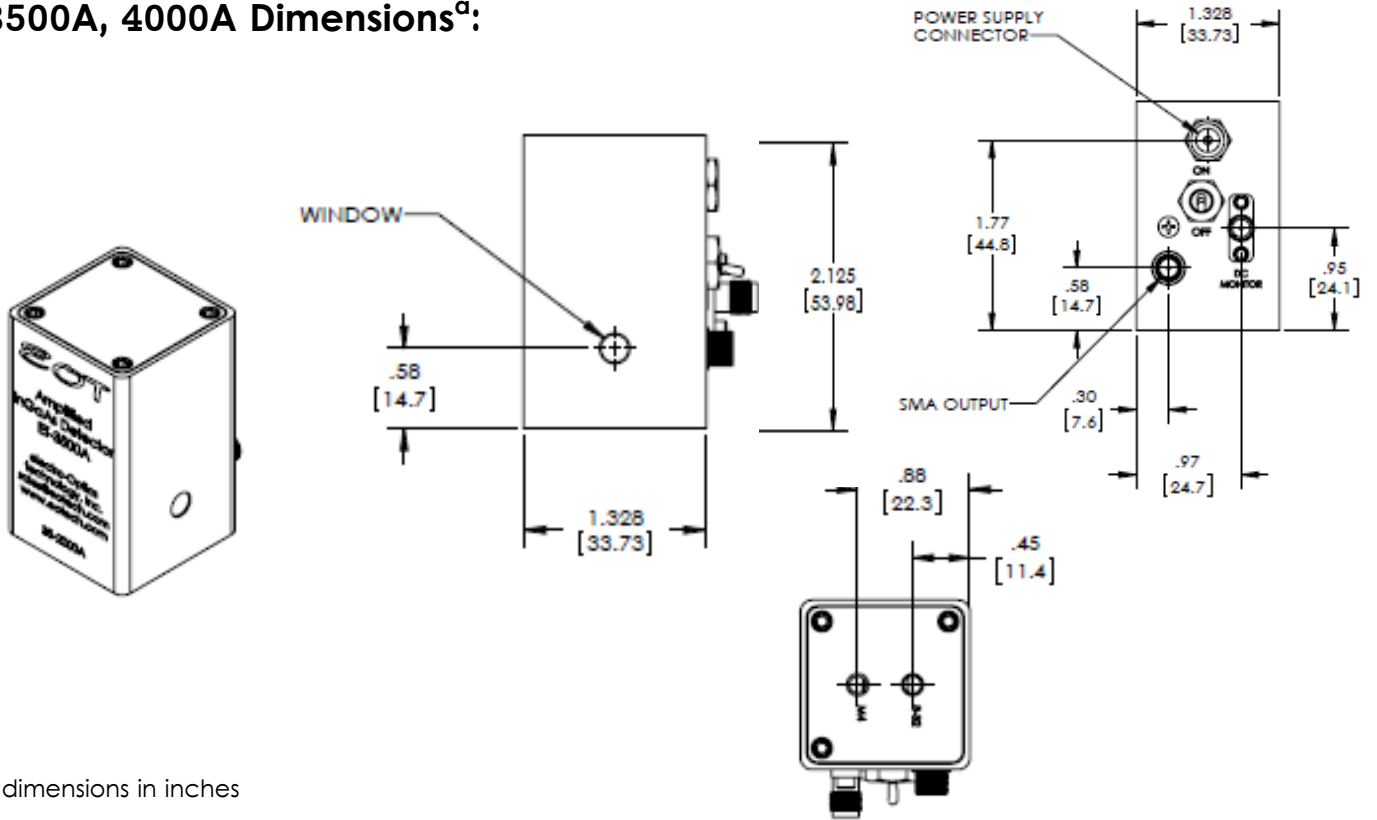
^a Product specifications are subject to change.

^b Not suitable for CW applications

Note: All products are RoHs compliant.

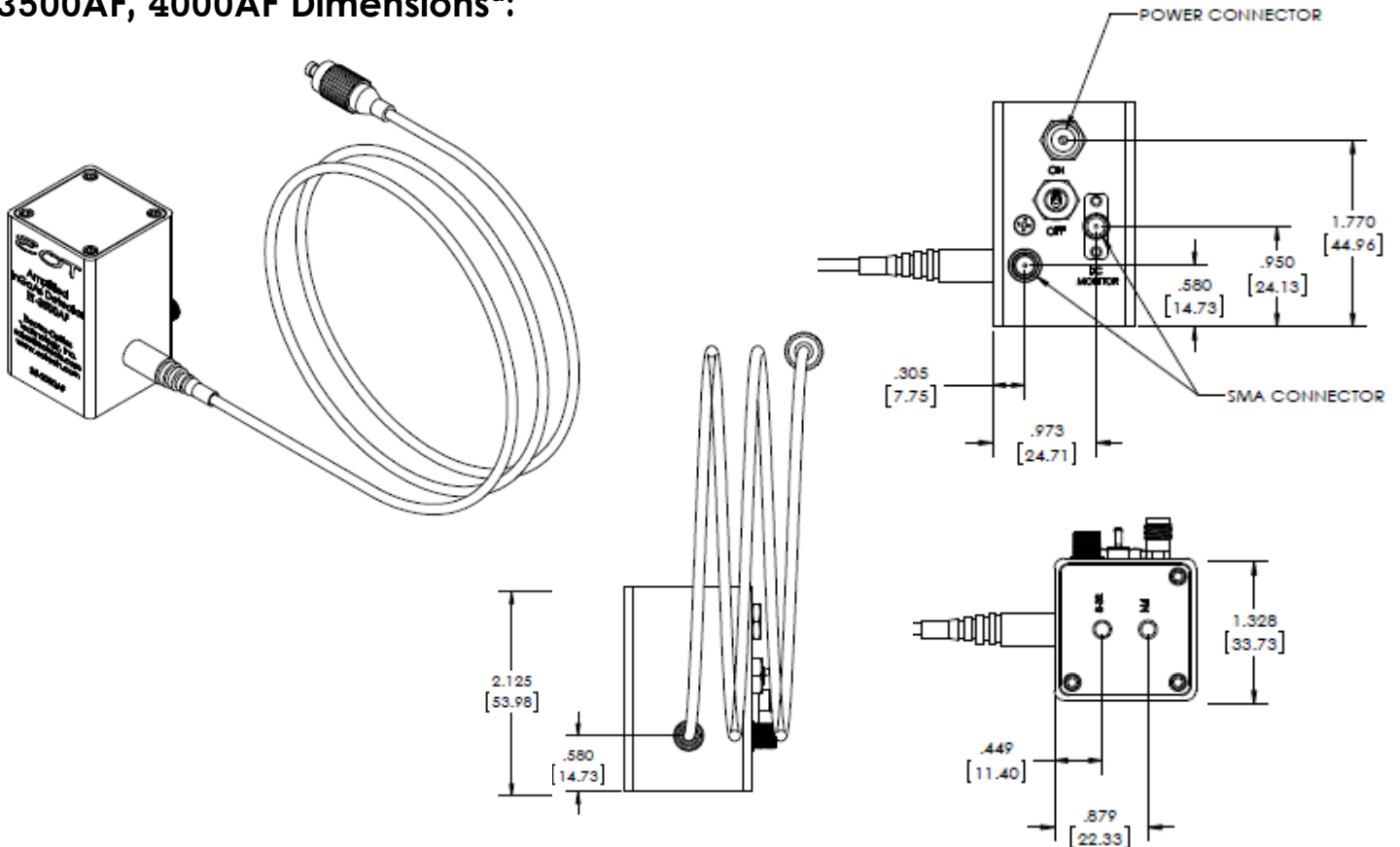


ET-3500A, 4000A Dimensions[Ⓐ]:



[Ⓐ] All dimensions in inches

ET-3500AF, 4000AF Dimensions[Ⓐ]:



[Ⓐ] All dimensions in inches