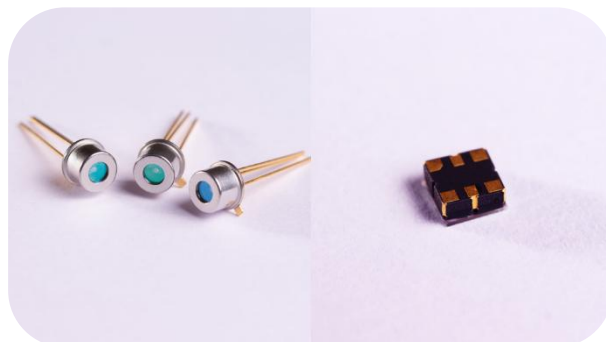


The Aura series of *Noiseless InGaAs[®]* Avalanche Photodiodes (APDs) are engineered for infrared detection. They have an extremely low excess noise factor and high sensitivity, making them ideal for applications using Time-of-Flight.



Noiseless InGaAs[®] refers to Phlux's patented compound semiconductor technology, which enables APDs to operate exceeding avalanche gain of 100 without excess noise factor induced degradation of the signal-to-noise ratio (SNR).

Features

- ✓ Spectral response 950 – 1650 nm.
- ✓ Can be operated at high gain, $M > 100$.
- ✓ Low excess noise factor, $F < 3.5$ @ $M = 100$.
- ✓ Low dark current and high sensitivity.
- ✓ Low temperature coefficient of breakdown voltage (< 20 mV/K).
- ✓ Fast rise/fall time of impulse response.
- ✓ RoHS-compliant.
- ✓ Available in TO-46 and SMD packages, other formats available on request.

Applications

- ✓ Laser Range Finder (LRF).
- ✓ Light Detection and Ranging (LiDAR).
- ✓ Optical Coherence Tomography (OCT).

Please contact Phlux directly for a full version of this product datasheet:
connect@phluxtechnology.com

Devices undergo burn-in to assure high reliability.

Phlux technology is certified to ISO-9001 and the product is designed to meet MIL-STD-883 specifications.

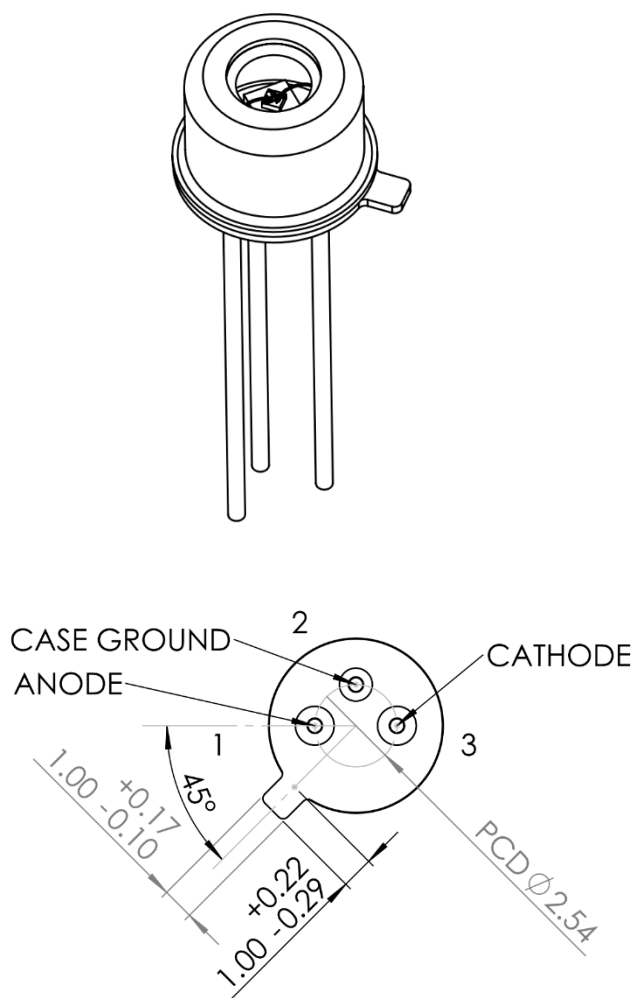
1. Package Mechanical Dimensions

TO-46 3 PIN (HIGH PROFILE)

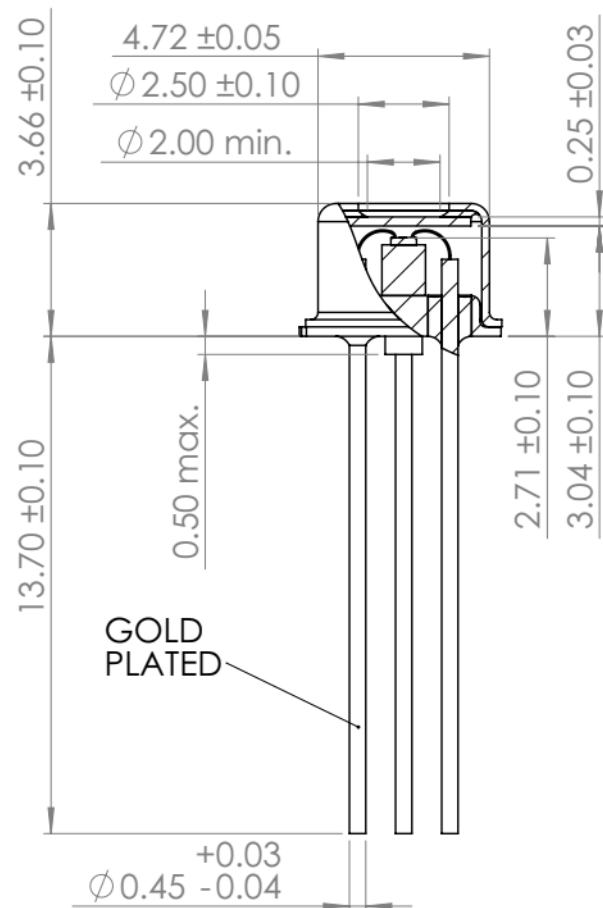
Diagram units in mm

Pin metal: Gold plated.

Optical window AR coated with > 98% transmission from 1050 to 1650 nm.



Bottom view

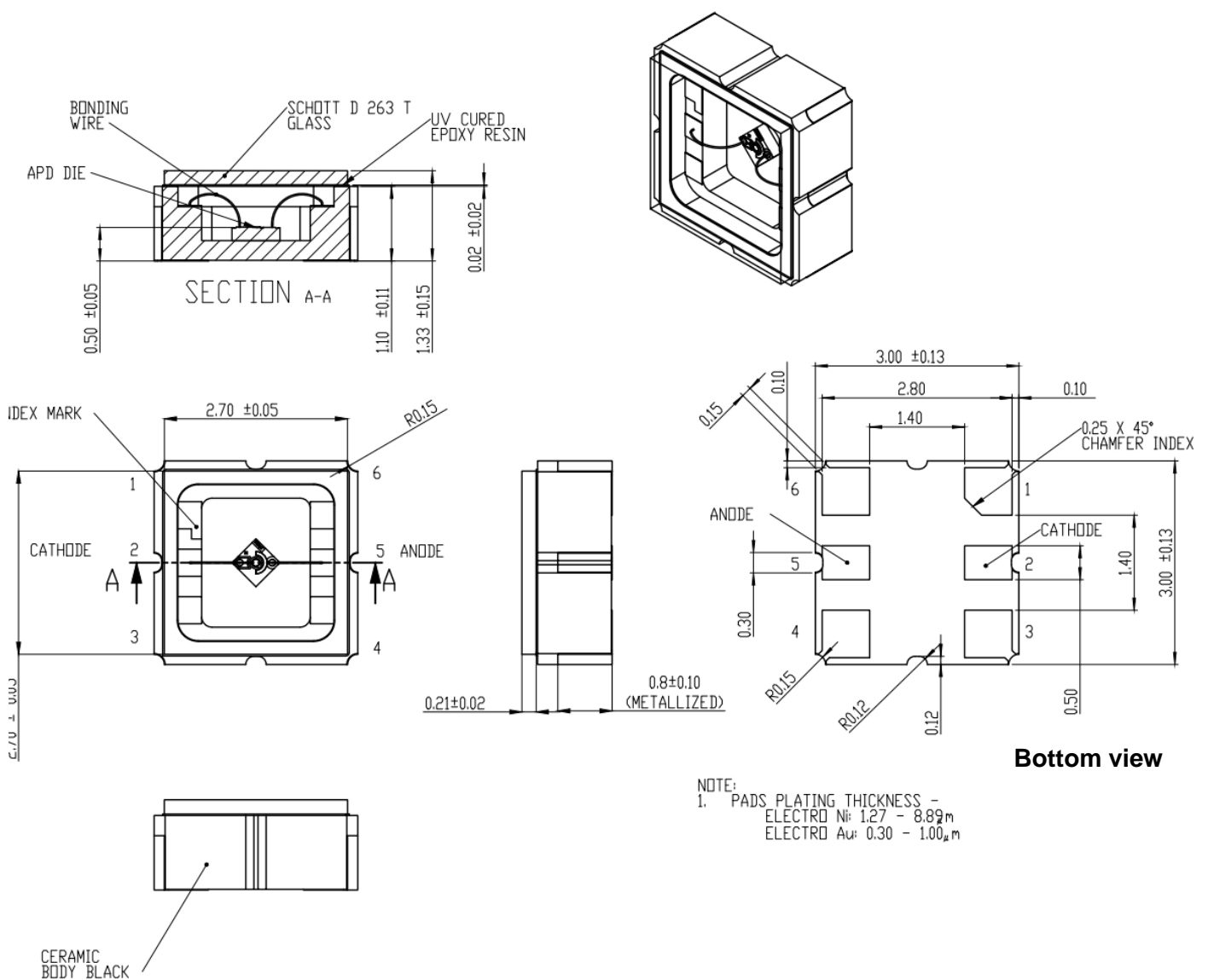


Surface-Mount Device (SMD)

Diagram units in mm

Optical window AR coated with > 98% transmission from 1050 to 1650 nm.

Pin 1, 3, 4, 6 are not connected (NC) electrically - can be used as mechanical PCB connection.



2. Ordering Information

Part Number	Package	Description	MoQ
PX01200-TO	TO-46	APD in TO-46	
PX01200-SM	SMD	APD in SMD	

Contact sales for bare die, chip on sub-mount and fibre pigtailed package options.

3. Phlux Technology Address and Contact Details

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2. A critical component is any component of a life support device or system whose failure to perform can be reasonably expected to cause the failure of the life support device or system, or to affect its safety or effectiveness.