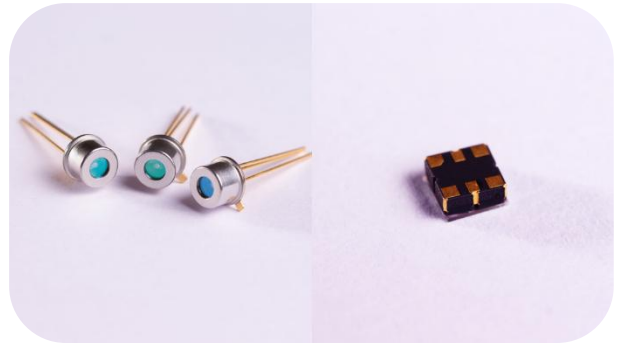


The Aura series of *Noiseless InGaAs®* Avalanche Photodiodes (APDs) are engineered for infrared detection. They have an extremely low excess noise factor and high sensitivity, making them ideal for applications using Time-of-Flight.



*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

- ✓ Light Detection and Ranging (LiDAR).
- ✓ Laser Range Finder (LRF).
- ✓ Optical Time Domain Reflectometry (OTDR).
- ✓ Free Space Communication.
- ✓ Optical / Fiber Sensing

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

## Product Brief – 80 µm

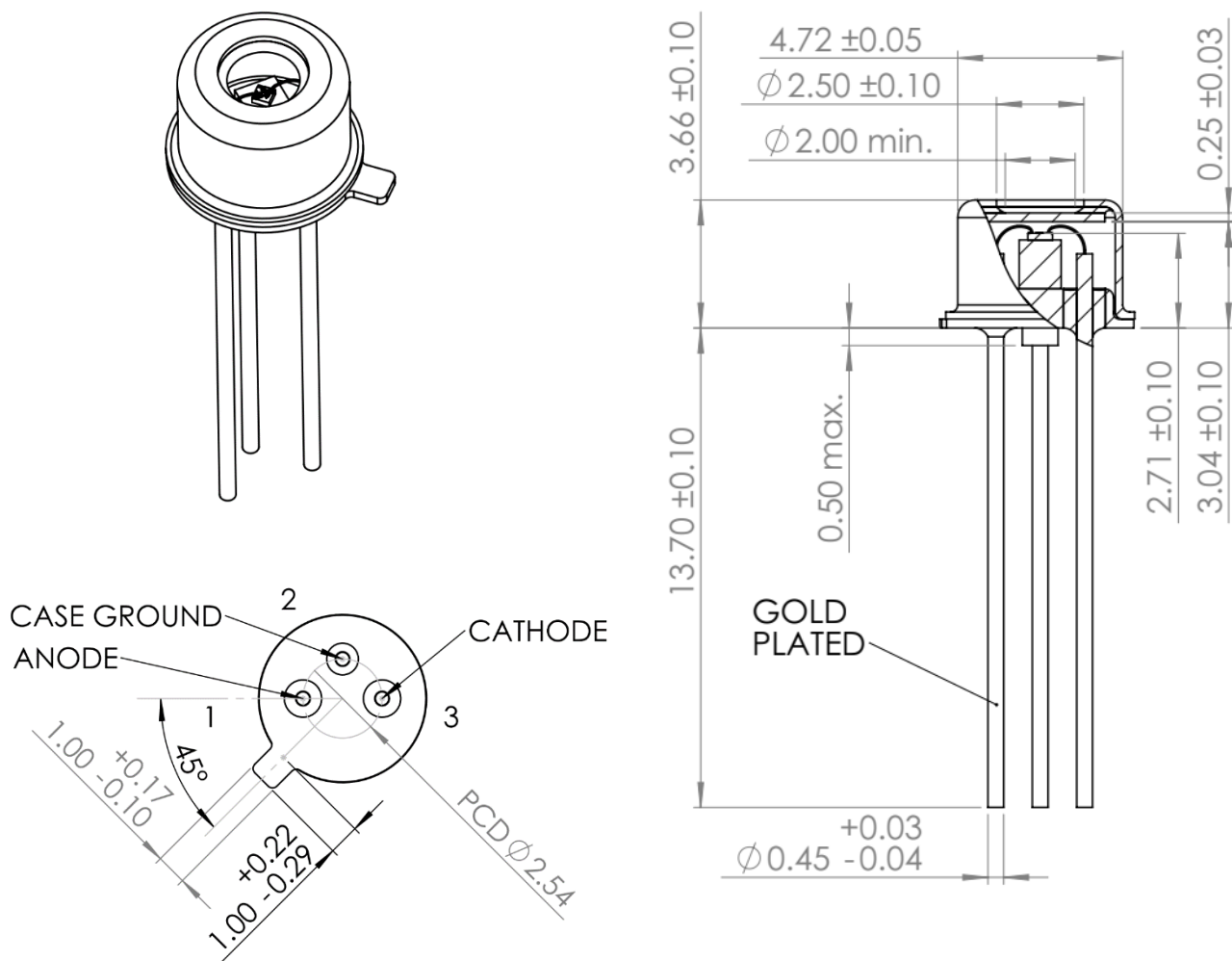
### 1. Package Mechanical Dimensions

#### 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**

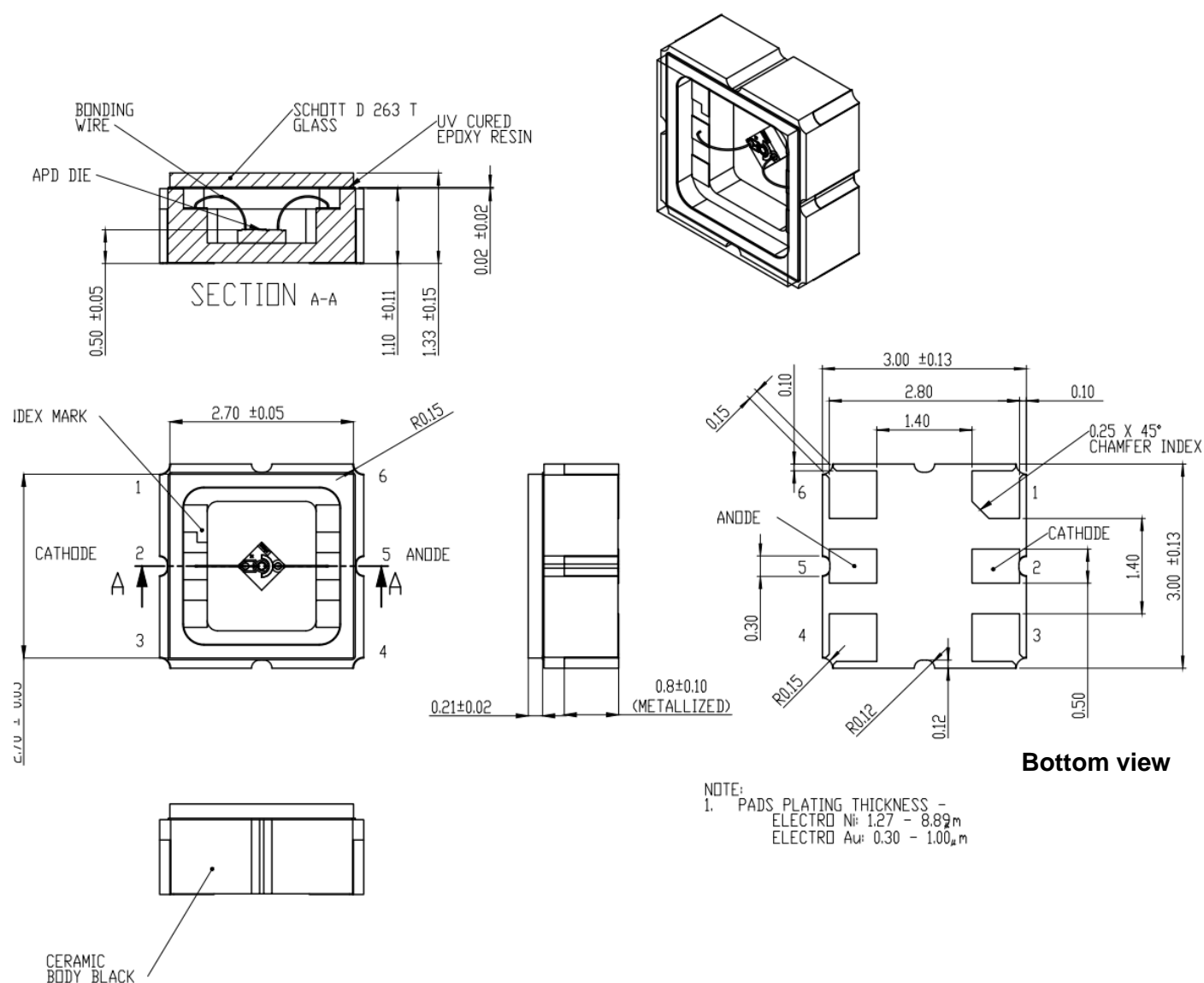
## Product Brief – 80 µm

### 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.**



## Product Brief – 80 µm

### 2. Ordering Information

Part Number	Package	Description	MoQ
PX01080-TO	TO-46	APD in TO-46	
PX01080-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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Phlux Technology Ltd.

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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.