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## C30703FH Avalanche Photodiode Interim Datasheet

### Mechanical Characteristics (see pages 2 and 3)

#### Photosensitive Surface:

- Shape: Square
- Active Area: 100 mm<sup>2</sup>
- Useful Dimensions: 10 x 10 mm
- Gold metallization on edge of active area

#### Assembly:

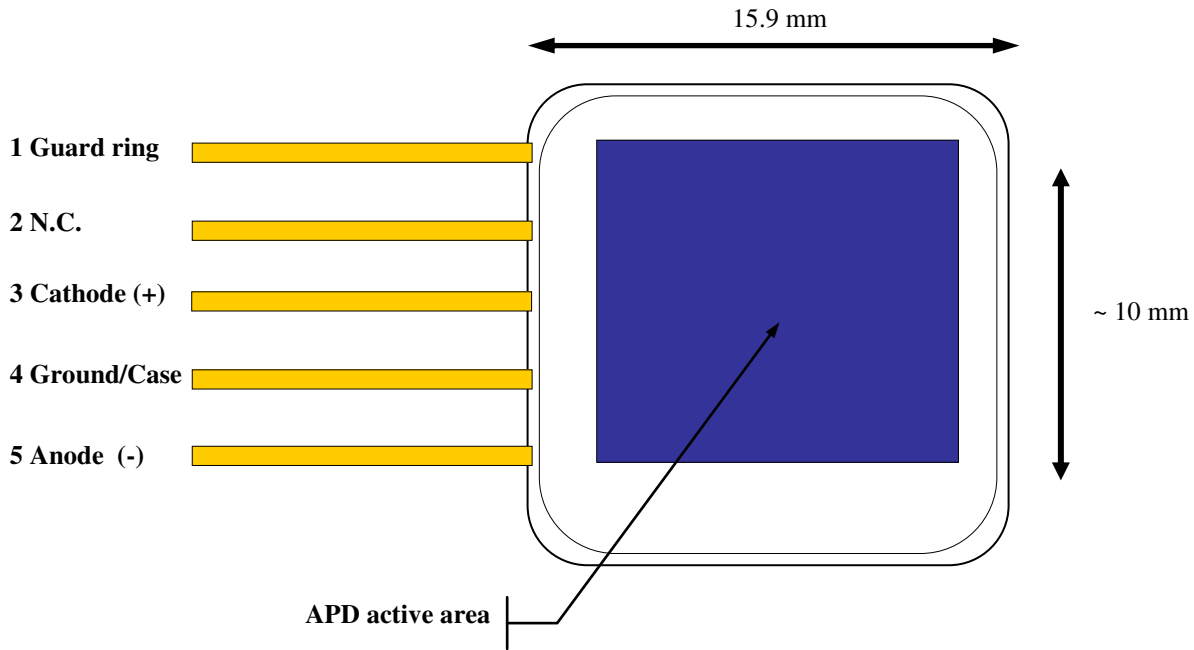
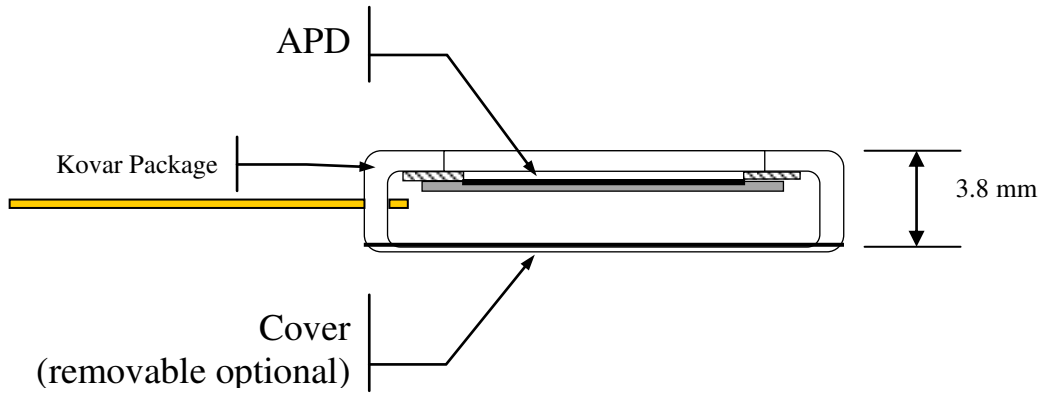
- Flat Pack as per drawings: can be modified if required.

#### Biasing:

- Usual operating conditions are: negative bias applied to anode, signal taken at cathode. However, positive bias can be applied to cathode, and the cathode AC coupled to the pre-amplifier input

#### Electrical Characteristics (typical)

- Responsivity at 900 nm 55A / W
- Dark Current 250 nA
- Spectral noise density 0.5 pA /  $\sqrt{\text{Hz}}$
- Capacitance, 100pF (100 $\mu\text{m}$  effective thickness)  
60 pF (200 $\mu\text{m}$  effective thickness)
- Rise Time 5 ns
- N.E.P. at 900 nm 23fW /  $\sqrt{\text{Hz}}$
- Also see page 3 for typical x-ray response.



## Typical Characteristics. C30703FH Avalanche Photodiode Family

