

THz Detector Studies

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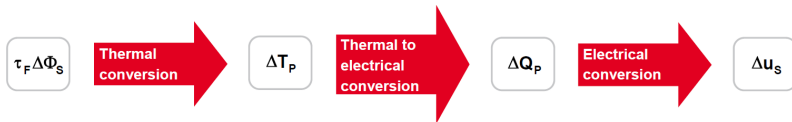
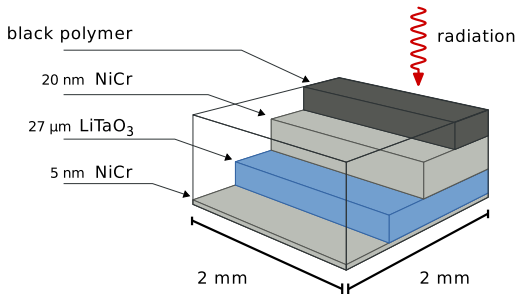
Outline

- ▶ Detection Basics
- ▶ Measurements



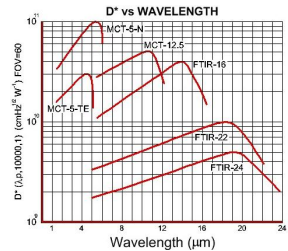
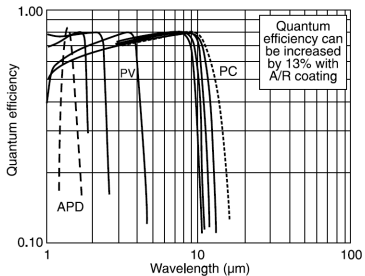
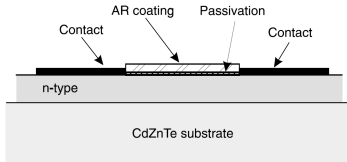
Pyroelectric Detectors

Detection basics



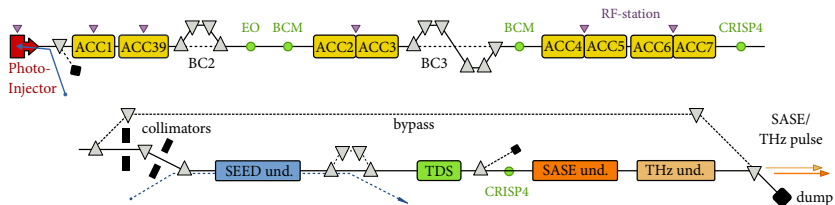
MCT Detectors

Detection basics



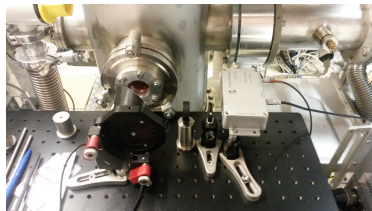
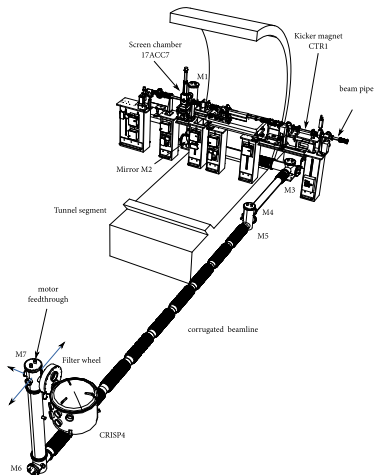
FLASH overview

Measurements



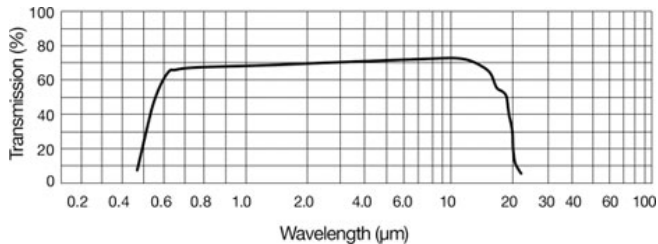
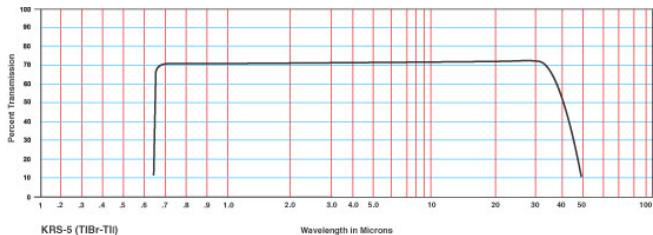
Experimental Setup

Measurements



Window transmission

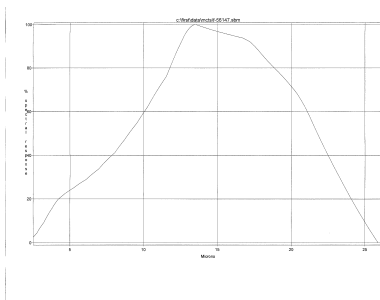
Measurements



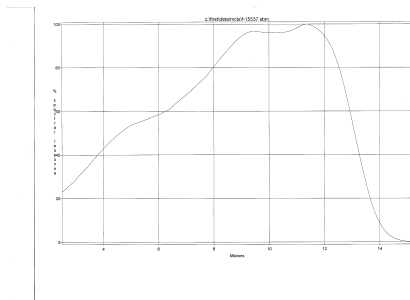
Detector response

Measurements

- MCT-24



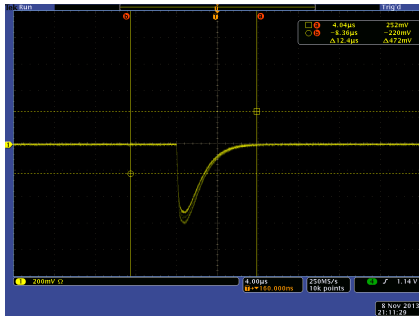
- MCT-13



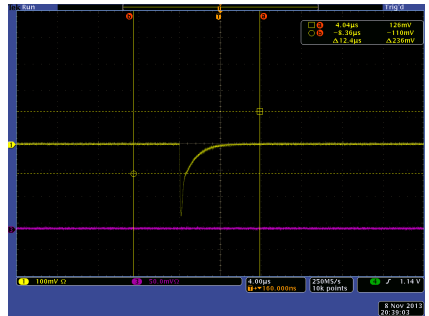
Scope traces

Measurements

- MCT-13



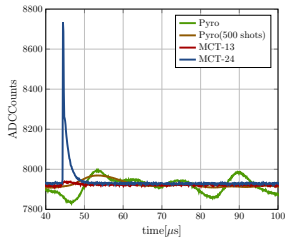
- MCT-24



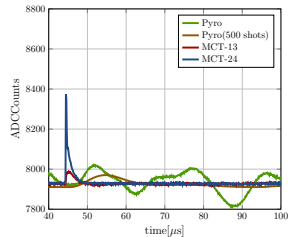
Raw signals

Measurements

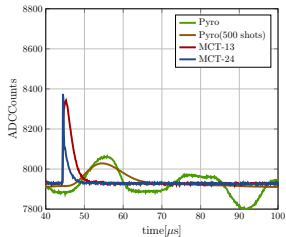
- 16 μm



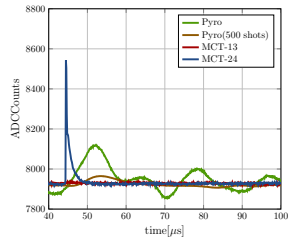
- 14 μm



- 8 μm

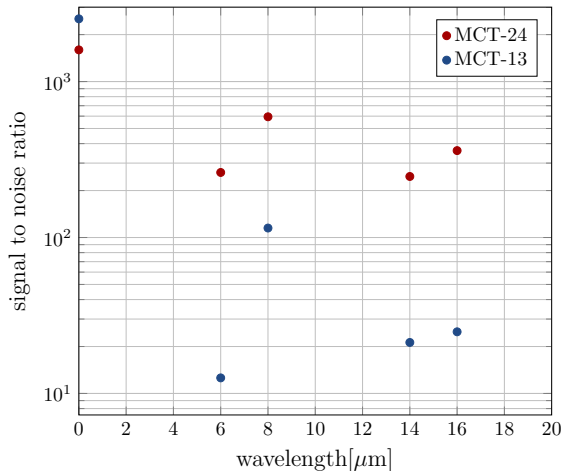


- 6 μm



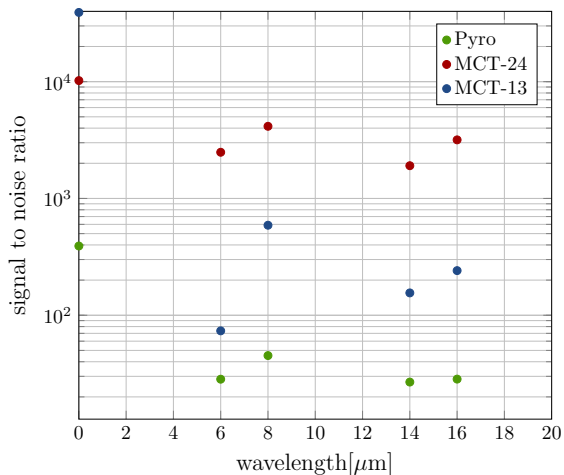
Signal to noise ratio single shot

Measurements



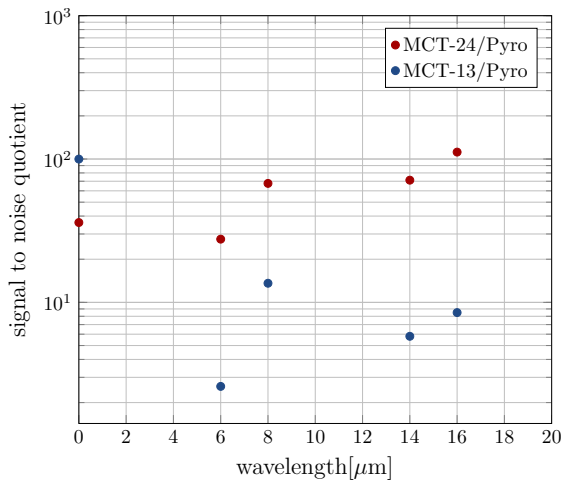
Signal to noise ratio after 500 shot average

Measurements



Signal to noise quotient after 500 shots average

Measurements



Thank You