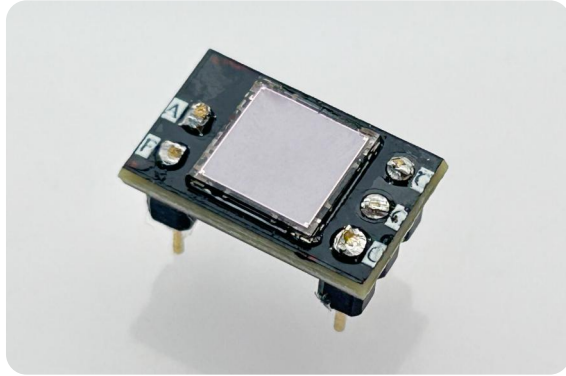


# 1.Overview

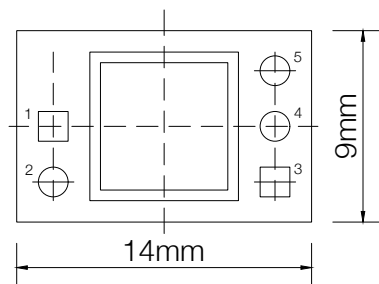
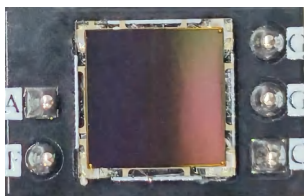


The FC-60035-PIN single point test board only includes the FC60035 chip and connectors that lead out the anode and cathode of the SiPM chip, and can output standard output signals and fast output signals. After receiving this type of single point testing board, users can design their own backend signal interface board to quickly verify the feasibility of SiPM based detector design schemes. It can also be used to couple with different types of scintillators to form an detector for rapid detection of different types of radiation.

## 2.Main technical parameters

- |  |   |
|--|---|
| ▶ Overall Dimensions                             | 9 mm × 14 mm  |
| ▶ SiPM Model                                     | ONSEMI FC60035, 1chip                                     |
| ▶ SiPM Dimensions                                | Active area of single chip 6.0 mm × 6.0 mm                |
| ▶ Power Input                                    | SIPM Bias voltage +24 V to +31 V                          |
| ▶ Signal and connector                           | standard signals and fast signals with 2.54 mm pin header |
| ▶ Polarity of Signal                             | Positive  |
| ▶ Power Consumption                              | less than 100 mW  |
| ▶ C60035 Peak PDE Wavelength                     | 420 nm  |
| ▶ C60035 Spectral Range                          | 300 nm ~ 950 nm   |
| ▶ C60035 recommended operating temperature range | +5°C ~ +40°C  |

### 3.Outline Dimension



- Pin definitions

Pin No.	Connection	Description
1	Anode	Standard signal output
2	Fast signal output	Fast signal output
3	Cathode	Positive bias power
4	Ground	GND
5	Ground	GND

Note: To use the fast output port, a 100nF bypass capacitor must be placed between pin 3 and pin 4.

## 4. Test

- In the single point test board testing of GAGG crystal coupled SiPM, a +28 V bias voltage is applied and a 100 nF bypass capacitor is connected to pin 3 to measure the signals of the fast output and standard output. Purple represents the standard output signal, while yellow represents the fast output signal.

