



2022-06-22

Specifications of CdTe pixe mount element

(Product type no. : P1S2040410MP010)

1. Products : Schottky type CdTe pixel mount element (Standard Product)
2. General Specifications
 - 1) Material : CdTe(Cadmium Telluride)
 - 2) Dimension : 4 (±0.05) x 4 (±0.05) x 1 (±0.05) [mm]
 - 3) Electrodes : Anode : In/Ti
Cathode : Pt
 - 4) Pixel pattern : Pixel size --- 600 X 600 [um]
Pixel pitch --- 1000 X 1000 [um]
Pixel number --- 16 (4 X 4)
 - 5) Substrate : FRP substrate (see attach figure)
3. Electrical Specifications
 - 1) Energy resolution (FWHM)

Measurement Condition : RI : 57Co(122keV) , 241Am(59.5keV)
Bias voltage = 700 [V] @ 23±3 [°C]

Specifications : The Spectral pattern can be confirmed. (each RI)
 - 2) Leakage Current

Measurement Condition : Bias voltage = 10 ~ 1000 [V] @ 23±3 [°C]

Specifications : Measurement only
4. Shipping form

The mount elements is fixed to the conductivity foam with a adhesive tape and it put in a plastic case. It is in a wrapping with a bubble wrap, and into the metal box. It packs to the carton box.
5. Storage

Storage temperature : 0 ~ 50 °C、 (No Condensation)
6. Submitted data
 - (1) Energy spectra for each mount element (Measure all 16ch at once)
 - (2) I-V curve for each mount element (Measure all 16ch at once)
7. Warranty

Within one year, we compensate the chips which appear to be out of the specifications.
8. Others

This product consists of Cadmium Telluride (CdTe). When decomposed, this material is harmful to human body. Do not take CdTe into human body in any form. When burned, chemically treated, or powdered, CdTe is decomposed and may be easily absorbed into human body.

Information described in this sheet is current as of June 2022.

The specifications is subject to change without prior notice due to improvements or other reasons. Before ordering, please contact us to check the updated information.

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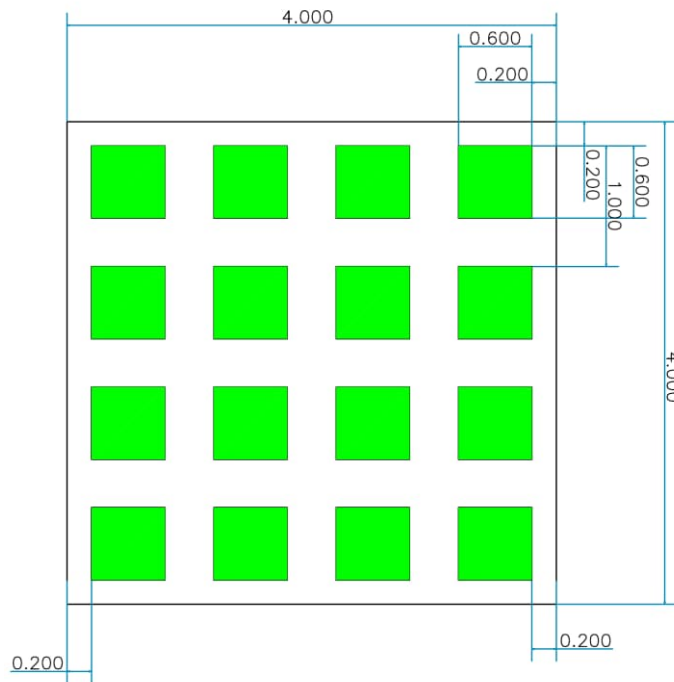
Standard 16ch pixel CdTe assembly



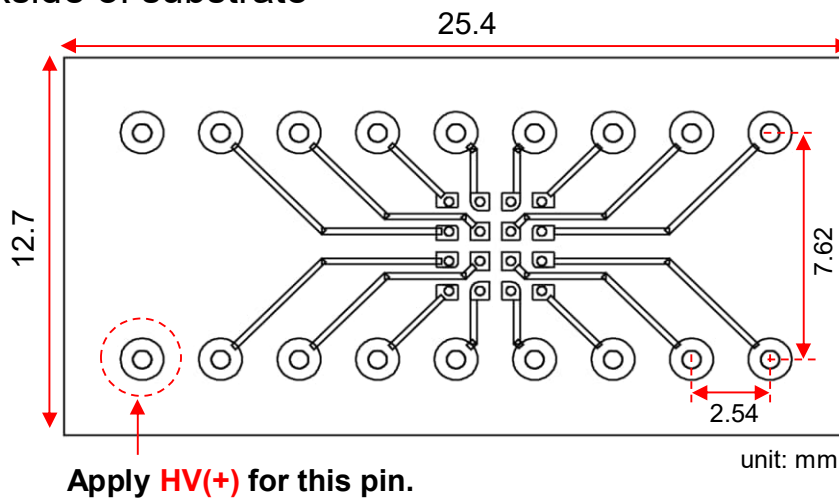
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Parts number
P1S2040410MP010

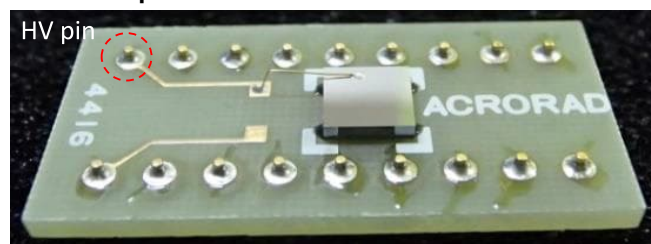
~ 16 pixel electrode pattern ~



~ Backside of substrate ~



~ Photograph of the product ~



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Headline of Precautions

1. Do not touch the CdTe element or HV wire. Touching it may cause a malfunction.
2. Apply a positive voltage to the HV pin. Do not apply a negative voltage, as overcurrent may occur and the element may be damaged if a negative voltage is applied.
3. When measuring the dark current or energy spectrum of each channel, set the same potential (ground) as the channel for measuring the potential of the other 15 channels. If other channels are floating, overcurrent may damage the element.
4. Make sure the connection to each pin is secure. If it is not done reliably, it will be difficult to get an accurate signal.

Please check those precautions in order to use it properly. Please be sure the warranty will not cover if it is damaged due to inappropriate use.

Acrorad Co., Ltd. Quality Assurance Division