

Development of an One-dimensional Circular Position Sensitive Delayline Anode

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We have developed a position sensitive detector that can be used for position sensing detection of photons or charged particles in space borne applications. Generally speaking, a position-sensitive detector consists of a charge multiplier which amplifies the incident photons or charged particles, an encoding charge collection anode, and decoding electronics. We have newly developed a circular one dimensional delay line position sensitive anode which is suitable for detecting charged particles when used with top hat type electrostatic analyzers. We have utilized micro-strip line approach to design the delay line anode. In this paper, we will describe the design principle of our delay line anode, and will present the result of the calibration experiment of the manufactured anode.

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