



## Planar Material Grades

### Select Counter Grade

Peak/Valley: 3:1 @ 59.5 keV  
Resolution: 25% (15 keV) @ 59.5 keV (FWHM)  
Peak/Valley: 1.6:1 @ 122 keV

### Discriminator Grade

Peak/Valley: 8:1 @ 59.5 keV  
Resolution: 15% (9 keV) @ 59.5 keV (FWHM)  
Peak/Valley: 2:1 @ 122 keV  
Resolution: 6% (8 keV) @ 122 keV \*\*

### Select Discriminator Grade

Peak/Valley: 8:1 @ 59.5 keV  
Resolution: 10% (6 keV) @ 59.5 keV (FWHM)  
Peak/Valley: 3:1 @ 122 keV  
Resolution: 6% (8 keV) @ 122 keV (FWHM)

### Spectrometer Grade

Peak/Valley: 8:1 @ 59.5 keV  
Resolution: 10% (6 keV) @ 59.5 keV (FWHM)  
Peak/Valley: 3:1 @ 122 keV  
Resolution: 6% (8 keV) @ 122 keV (FWHM)  
Peak/Valley: 1.8:1 @ 662 keV  
Resolution: 3% (20 keV) @ 662 keV \*\*

\*\* Defined as 2 x Upper Half Width at Half Maximum (UHWHM)

#### NOTE:

Not all grades available for all sizes. Contact eV Microelectronics Sales for help in determining specifications and sizes. Typical measurements are performed with an applied field of between 100 and 200 Volts/mm of thickness, preamplifier shaping time of 0.25 - 2.0  $\mu$ s and an external ultra low noise preamplifier (eV-5093). Noise threshold for all classifications 10 keV.

## Pixelated Detector Grades

Due to the infinite possibility of sizes and shapes of pixels available, please contact eV Microelectronics to help determine size and pixel requirements needed to support your application.

NOTE: Electron transport properties are determined by using an Alpha emitting source and fitting peak position versus bias voltage data to the Hecht equation. CZT electron transport characterization is performed on an ingot basis and is not performed on individual parts unless specified. Detectors ordered with specific electron transport characteristics will be cut from known ingots meeting requested specification.

