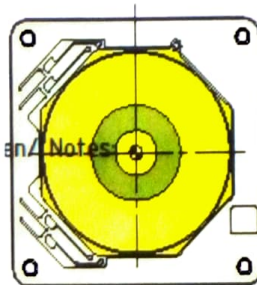


**PIPS specification sheet**

Series CD

**Model:**

**CD-HET1000-300EB/C**



|                                     |               |                      |
|-------------------------------------|---------------|----------------------|
| Chip dimensions:                    | 41            | mm (flat to flat)    |
| Number of pixels:                   | 2             |                      |
| Pixel size (central):               | 50            | mm <sup>2</sup>      |
| Pixel size (middle):                | 190           | mm <sup>2</sup>      |
| Pixel size (external):              | 810           | mm <sup>2</sup>      |
| Mount:                              | Ceramic board | Supplied by customer |
| Chip thickness:                     | 300 +/- 15    | µm                   |
| Depletion depth (min./max.):        | 285 / 315     | µm                   |
| Junction window thickness:          | < 1500        | Nm                   |
| Ohmic window thickness:             | < 1500        | nm                   |
| Pixel capacitance (external pixel): | 290           | pF                   |
| Operating temperature:              | -20/+35       | °C                   |
| Storage temperature:                | -35/+100      | °C                   |

**Estimated detector performance:**

|  | <i>typ.</i> | <i>max.</i> |       |
|--|-------------|-------------|-------|
| Operating voltage:                     | 40          | 100         | Volts |
| Reverse current largest pixel at 20°C: |             | 300         | nA    |
| Max total current at 20°C:             |             | 350         | nA    |
| Electronic noise large pixel:          |             | 19          | keV   |

- Standard tests are performed following IEEE Standard Test Procedures for Semiconductor Charged Particle Detectors No IEEE Std 300-1988.
- The electronic noise is approximated with a pulser resolution or RMS meter.