

**Main Application:** Time-of-Flight measurements with heavy ions.

Unless specified otherwise, supplied in E Mount for 10–25 µm thickness; in T Mount for >25 µm thickness.

Active Area (mm <sup>2</sup> )	Maximum Thickness Variation (µm)	Depletion Depth 15 µm Range 7-15 µm	Depletion Depth 25 µm Range 15.1-25 µm	Depletion Depth 40 µm Range 25.1-40 µm	Depletion Depth 50 µm Range 40.1-65 µm	Depletion Depth 75 µm Range 65.1-85 µm	Depletion Depth 100 µm Range 85.1-110 µm
		Model No.	Model No.	Model No.	Model No.	Model No.	Model No.
10	±0.5	D-020-010-15					
50	±0.5	D-035-050-15	D-035-050-25	D-020-050-40	D-015-050-50	D-015-050-75	D-015-050-100
150	±1.0		D-060-150-25	D-035-150-40	D-030-150-50	D-030-150-75	D-025-150-100
300	±1.0		D-095-300-25	D-055-300-40	D-045-300-50	D-040-300-70	D-030-300-100
450	±3.0		D-100-450-25	D-090-450-40	D-070-450-50	D-060-450-75	D-060-450-100

\* All standard totally depleted detectors are cut off-axis from the parent crystal at a specific angle that will minimize channeling. Larger areas available on special order. Other areas and depths available on special order.

\*\* First three digits of Model No. indicate total system noise width measured with standard ORTEC electronics and 0.5-µs shaping time constants. Noise width is given for the smallest thickness (largest capacitance) in each range and specified nominal area. For high-capacitance units, performance depends on actual thickness and area.

## Mounting Arrangements

**A** This is a "ring mount"; i.e., the silicon wafer is offered on its ring without output connectors. This infrequently used arrangement is available on special request. For 40 µm to 100 µm detectors.

**E** This is a special type of transmission mount in which four screws can be carefully adjusted to avoid excessive pressure on particularly fragile silicon wafers. For 15 µm to 25 µm detectors.

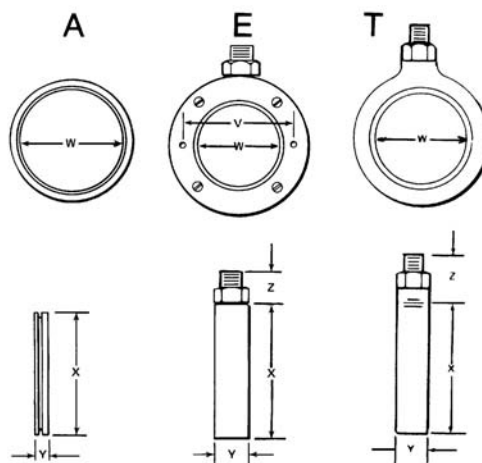
**T** Microdot on the side of the can; without adjustable screws. (Open back.) For 40 µm to 100 µm detectors.

Detector Size (mm <sup>2</sup> )	W (Nominal)	Type A Mount		Type E** Demountable Transmission				Type T § Transmission Mount		
		X	Y	X	Y	Z	V	X	Y	Z
050	8.0	15.2	3.7	25.1	7.7	7.0	18.2	19.4	7.9	9.9
150	13.8	22.0	3.7	31.9	7.7	7.0	25.0	26.1	7.9	9.9
300	19.5	27.1	3.7	37.1	7.7	7.0	30.1	31.6	7.9	9.9
450	23.9	30.5	3.7	40.2	7.7	7.0	33.3	34.8	7.9	9.9
Tol.	±0.5	±0.3	±0.3	±0.5	±0.3	±0.3	±0.3	±0.3	±0.3	±0.3

Dimensions are given in millimeters.

\*\*E Mounts may be disassembled by removing screws. V dimension provides distance between mounting holes that are 1.7 mm in diameter and suitable for 0.080 screws.

§ Built into a Microdot connector only.



Specifications subject to change  
120607