

Main Application: High-resolution charge-particle spectroscopy.

Ordering Information

- **To Order:** Add the appropriate letter **prefix** for the mounting desired. Example: **BA-013-025-1000**.
- **NOTE:** Alpha Suite Compatible Detectors: ULTRA-AS and Low-Background R Series detectors in B-mount are guaranteed compatible with the Alpha Suite products (DUO, MEGA, ARIA, ENSEMBLE). All other detectors require an approved special for compatibility and warranted specifications.

Active Area (mm ²)	Guaranteed Maximum Resolution (keV)**		Minimum Depletion Depth 1000 μm	Guaranteed Maximum Resolution (keV)**		Minimum Depletion Depth 1500 μm§	Guaranteed Maximum Resolution (keV)**		Minimum Depletion Depth 2000 μm§
	α	β	Model No.	α	β	Model No.	α	β	Model No.
	25	13 14	6 6	A-013-025-1000 A-014-025-1000	14 16	9 11	A-014-025-1500 A-016-025-1500	16	11
50	14 15	7 8	A-014-050-1000 A-015-050-1000	16 18	11 13	A-016-050-1500 A-018-050-1500	17	12	A-017-050-2000
100	14 15	7 8	A-014-100-1000 A-015-100-1000	17 19	12 14	A-017-100-1500 A-019-100-1500	18	13	A-018-100-2000
150	15 16	9 10	A-015-150-1000 A-016-150-1000	18 20	13 15	A-018-150-1500 A-020-150-1500	19	14	A-019-150-2000
300	17 18	13 14	A-017-300-1000 A-018-300-1000	20 23	15 18	A-020-300-1500 A-023-300-1500	22	17	A-022-300-2000
450	18 19	13 14	A-018-450-1000 A-019-450-1000	21 26	16 21	A-021-450-1500 A-026-450-1500			

** First three digits of Model No. indicate total system resolution FWHM for ²⁴¹Am, 5.486-MeV alphas, using standard ORTEC electronics and 0.5-μs shaping time constants. Beta resolution approximated by pulse generator width FWHM.

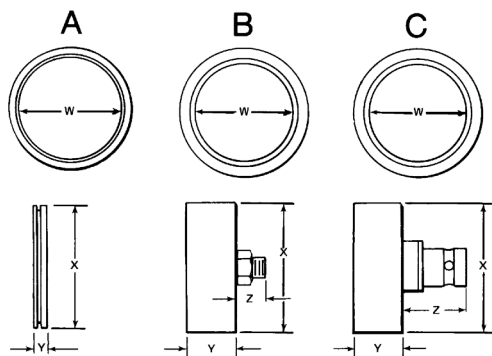
§ Requires special order.

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.
- B** Microdot connector on the rear of the can.
- C** BNC connector on the rear of the can.

Dimensions are given in millimeters.

For detectors 1500 or 2000 μm deep, add 1.5 mm to the Y dimension.



Special Configurations

Special configuration charged-particle detectors are available on special request.

Detector Size (mm ²)	W (Nominal)	Type A Mount		Type B Rear Microdot			Type C Rear BNC		
		X	Y	X	Y	Z	X	Y	Z
025	5.6	15.2	3.7	16.7	12.3	7.1	16.7	12.3	15.9
050	8.0	15.2	3.7	16.7	12.3	7.1	16.7	12.3	15.9
100	11.3	22.0	3.7	23.6	12.3	7.1	23.6	12.3	15.9
150	13.8	22.0	3.7	23.6	12.3	7.1	23.6	12.3	15.9
300	19.5	27.1	3.7	28.6	12.3	7.1	28.6	12.3	15.9
450	23.9	30.5	3.7	32.0	12.3	7.1	32.0	12.3	15.9
Tol.	±0.5	±0.3	±0.3	±0.3	±0.3	±0.3	±0.3	±0.3	±0.3

Specifications subject to change
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