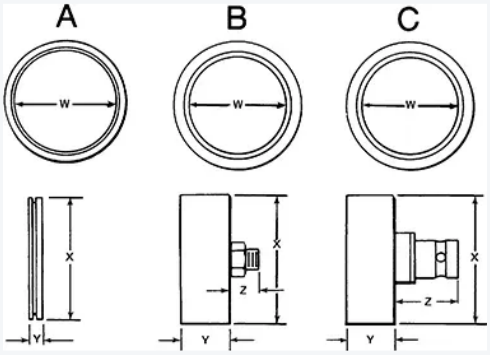
ORTEC

ORTEC F Series

Partially depleted silicon surface-barrier detectors for heavy ions

Partially depleted silicon surface-barrier detectors for heavy-ion spectroscopy, with active areas from 100 to 900 mm² and depletion depths of at least 60 µm. Standard detectors are cut off-axis from the parent crystal to minimise channelling and are supplied in B mount unless specified otherwise.



Detector type	Active area	Depletion depth
Partially depleted silicon surface barrier [1]	**100, 300, 400, 600 or 900 mm²** [1]	**≥60 µ, partially depleted; g reater depths on special order** [1]

Specifications

DETECTOR

Detector type	Partially depleted silicon surface barrier	[1]
Active area	100, 300, 400, 600 or 900 mm²	[1]
Depletion depth	≥60 µm, partially depleted; greater depths on special order	[1]
Alpha Suite compatibility	Not guaranteed compatible; requires an approved special for compatibility and warranted specifications	[1]

PERFORMANCE

Maximum noise	18 keV (100 mm²), 23 keV (300 mm²), 28 keV (400 mm²), 33 keV (600 mm²), 35 keV (900 mm²)	[1]

MECHANICAL

Mounts	A (ring mount without connectors, special request), B (rear Microdot connector), C (rear BNC connector); supplied in B mount unless specified	[1]

ORDERING & ACCESSORIES

Models	F-018-100-60, F-023-300-60, F-028-400-60, F-033-600-60, F-035-900-60	[1]

GENERAL

Main application	Heavy-ion spectroscopy	[1]
Maximum field strength	≥15 kV/cm	[1]

Sources

[1] **F Series Partially Depleted Silicon Surface Barrier Radiation Detector**
ORTEC (AMETEK) · product-page · Page title; Main Application; Ordering Information · checked 2026-10-16
https://www.ortec-online.com/products/radiation-detectors/Silicon-Charged-Particle-Radiation-Detectors/F-Ser...

Every value is taken from the manufacturer’s own document; the number after the value refers to the source list. Always check against the latest datasheet before ordering.

The data comes from the manufacturer’s published documents. Manufacturers may change specifications; the current configuration and performance are confirmed in the quotation.