

FEATURES:

- Cost-effective design
- Ceramic frame package
- Low capacitance
- Thin SiO₂ layer

APPLICATIONS:

- Alpha-particle spectrometry
- Detection of protons, electrons, and ions
- Radon detection and monitoring
- Physics experiments
- Spectrometric and counting systems



Table 1 - ABSOLUTE MAXIMUM RATINGS

Parameter	Rating
Maximum reverse voltage	80 V

Table 2 - SPECIFICATIONS

Parameter	Min.	Typical	Max.	Conditions / Notes
Active area		400 mm ²		20 × 20 mm
Operating reverse voltage, V _R	1 V		60 V	
Dark current		70 nA	150 nA	V _R = 60 V, T = 20 °C
Capacitance		100 pF	150 pF	V _R = 60 V
Energy resolution at 5.486 MeV (²⁴¹ Am), FWHM		≈ 1.5 %		
Weight		1.7 g		

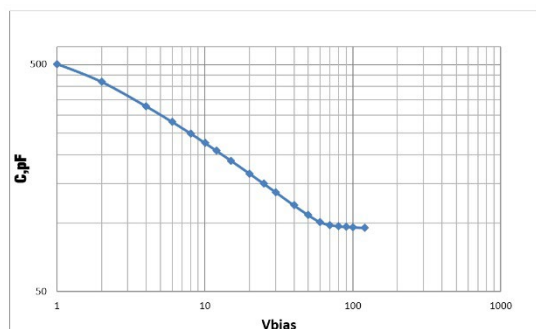


Fig. 1. Detector capacitance vs. reverse voltage. ⁽¹⁾

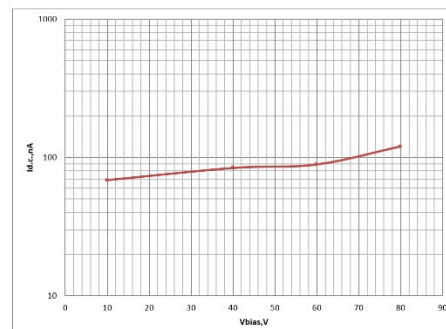


Fig. 2. Dark current vs. reverse voltage.

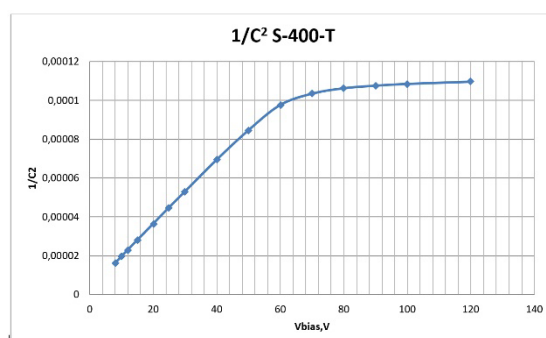


Fig. 3. Inverse-square capacitance (1/C²) vs. reverse voltage. ⁽¹⁾

(1) Data points above the absolute maximum rating are provided for characterization purposes only.

MECHANICAL DIMENSIONS AND PIN CONFIGURATION

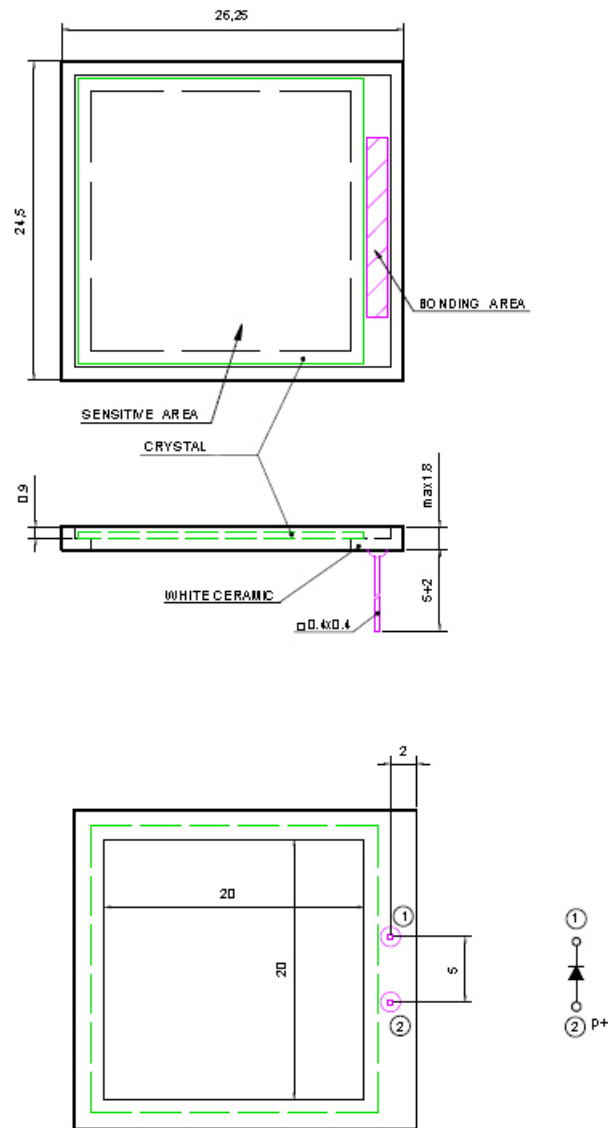


Fig. 4. Package outline and pin configuration. Dimensions are in millimetres.

CAUTION: DO NOT TOUCH THE DETECTOR ACTIVE AREA.



ESD CAUTION

This detector may be damaged by electrostatic discharge (ESD). Handle the detector only at an ESD-protected workstation and observe appropriate ESD precautions.

Manufacturer: AlexDetector
Website: <https://shmytov.com>

PURCHASE AND USE CONDITIONS FOR OEM PRODUCTS

OEM products are not intended for use by end users. They are supplied exclusively to developers and manufacturers of electronic equipment for integration into their own products. The manufacturer cannot verify the customer's storage, handling, or operating conditions; compliance with the Absolute Maximum Ratings, Specifications, and other requirements stated in the product documentation; or the customer's technical qualifications. By purchasing this product, the customer acknowledges that it is not eligible for return or replacement. Each production batch undergoes quality control before shipment.