

FEATURES:

- Low cost
- Low terminal capacitance
- Compact package

APPLICATIONS:

- Nuclear explosion detection
- Fast-neutron detection
- Radiation measurements in nuclear reactors
- X-ray and gamma-ray detection
- Experimental physics

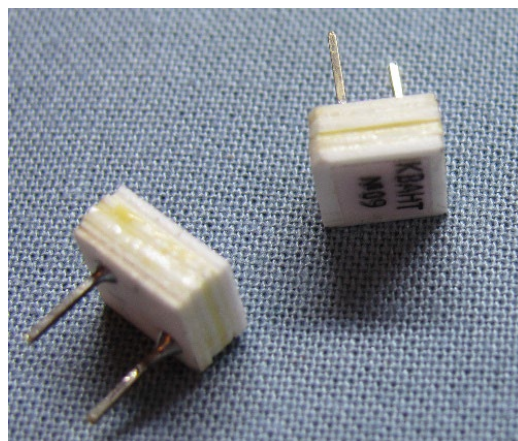


Table 1 - ABSOLUTE MAXIMUM RATINGS

Parameter	Maximum rating
Reverse voltage	60 V

Table 2 - SPECIFICATIONS

Parameter	Min.	Typ./Nom.	Max.	Unit
Active silicon volume		1		mm ³
Equivalent dose-rate measurement range	2.5		500	Sv/year
Operating reverse voltage	0		55	V
Dark current		0.1	100	nA
Terminal capacitance			2	pF
Operating temperature range	-40		+60	°C
Weight			1	g

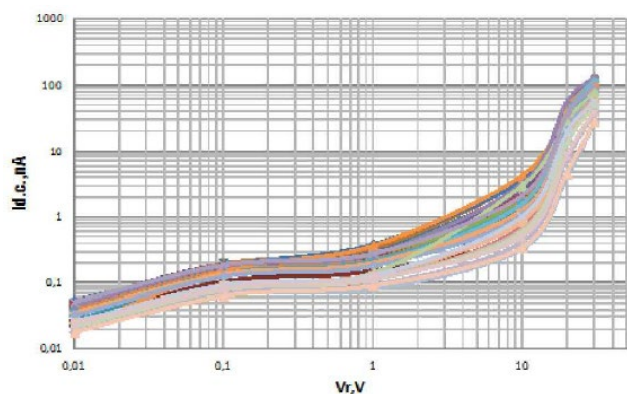


Fig. 1. Dark current vs. reverse-bias voltage for multiple detector samples.

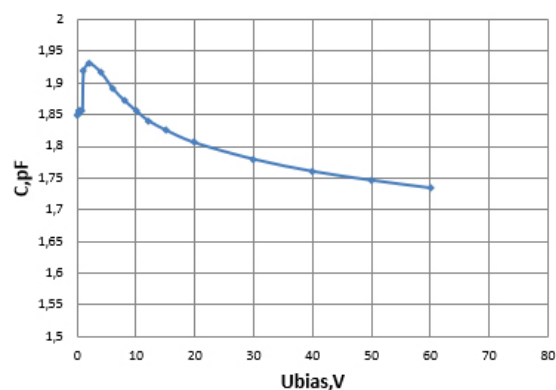


Fig. 2. Terminal capacitance vs. reverse-bias voltage.

EXAMPLE OUTPUT SIGNALS

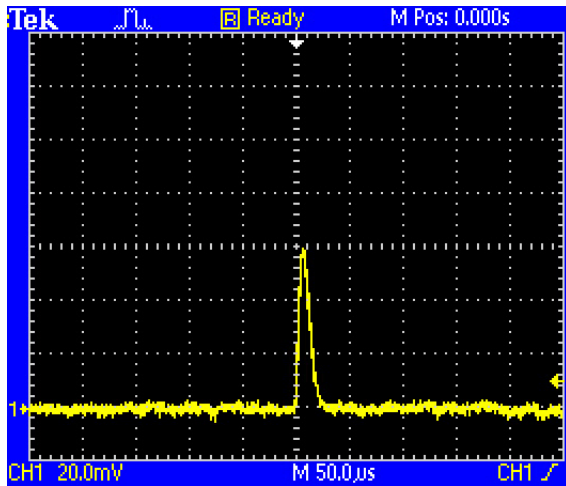


Fig. 3. Typical output pulse from a ^{60}Co source, measured using the α -CSA charge-sensitive amplifier and the SA-25 shaping amplifier.

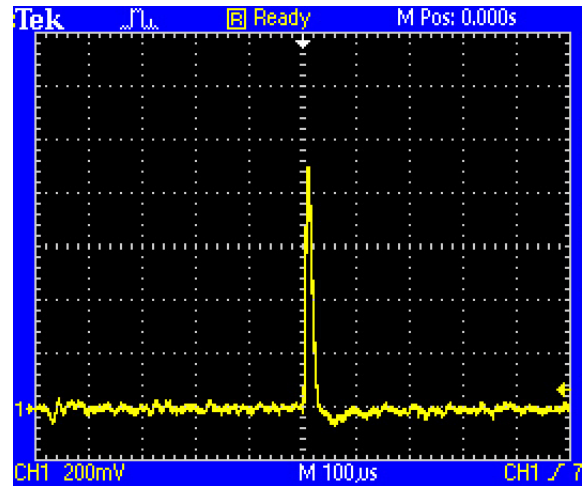


Fig. 4. Typical output pulse from a ^{60}Co source, measured using the CSA-250 charge-sensitive amplifier and the SA-25 shaping amplifier.

PACKAGE DIMENSIONS AND PINOUT

Pin 1 - Cathode (K)

Pin 2 - Anode (A, p+)

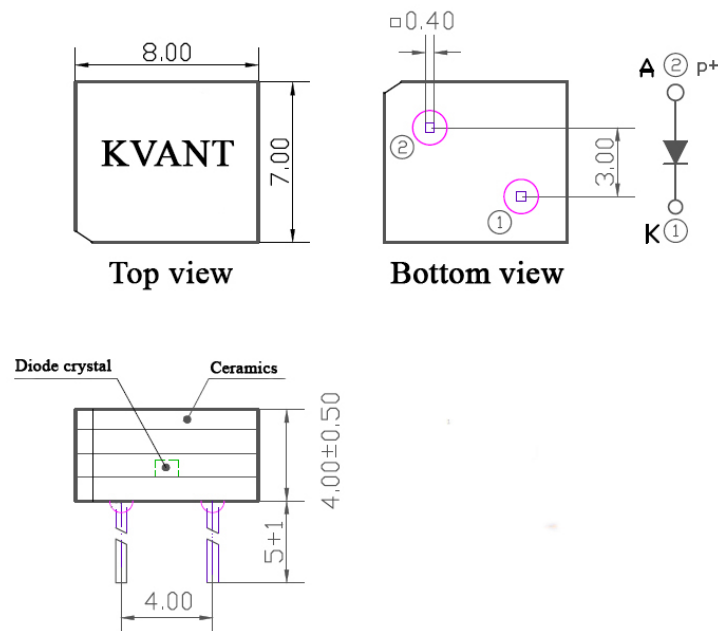


Fig. 5. Package outline and pinout. All dimensions are in millimeters.

Manufacturer: AlexDetector

Website: <https://shmytov.com>

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