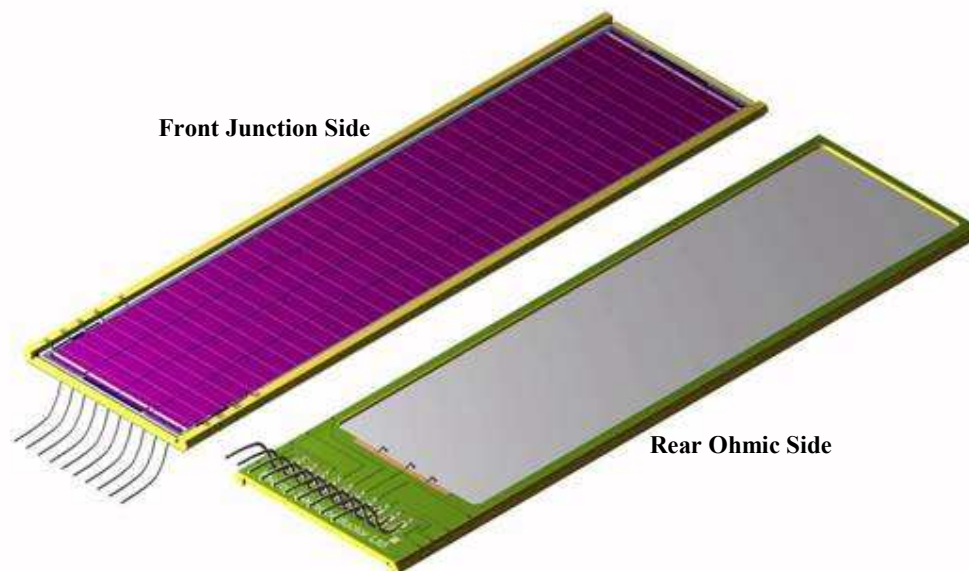


SPECIALIST DETECTORS FOR NUCLEAR PHYSICS

SILICON DETECTOR TYPE: POSITION SENSITIVE DETECTOR (PSD)
 DESIGN: Silicon planar ion implanted structure p on n silicon totally depleted with resistive p junction layer featuring high uniformity and equipotential channel along the linear axis between the two anodes of this common cathode device on all microstrip channels.



The X2 detector assembly as viewed from the junction side and rear ohmic side

DESIGN	X1	X2
TECHNOLOGY	4	6
N ^o CHANNELS	16	4
POSITION SENSITIVE	1 axis on each of the 16 channels	1 axis on each of the 4 channels
POSITION RESOLUTION	200 μm	5650 μm
STRIP AREA		5.55 x 94.80 mm ²
ACTIVE AREA	50 x 50 mm ²	22.2 x 94.8 mm ²
CHIP DIMENSION		24.6 x 96.8 mm ²
FULL DEPLETION (FD)	10 - 250 V Subject to selected thickness	20 V
LEAKAGE CURRENT (FD)	50 – 250 nA Subject to selected thickness	30 – 50 nA
TOTAL CURRENT (FD)	1 – 3 μA	1 μA
CAPACITANCE (FD)	40 – 20 pF/cm Subject to selected thickness	600 pF/strip
INTER ANODE RESISTANCE	3 – 10 KΩ	4 – 10 KΩ
ENTRANCE/EXIT WINDOW	0.2 μm	
THICKNESS	60, 140, 300, 500, and 1000 μm	300 μm
ALPHA RESOLUTION	55 KeV Typical	75 KeV Typical
PACKAGES	PCB with connectors 70.0 x 80.0 x 1.6 mm ³	PCB with connections 98.0 x 27.76 x 1.6 mm ³
CONNECTORS	Leading Edge connector	Junkosha Miniature Coaxial cable
MINIMUM ACCEPTANCE LEVEL	100 %	100 %

EXPERIMENT: TIARA, UNIVERSITY OF SURREY.

QUALITY ASSURANCE :ISO9001

