

**SPECIALIST DETECTORS FOR NUCLEAR PHYSICS**

SILICON DETECTOR TYPE:	TOTALLY DEPLETED PLANAR STRUCTURE
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.
TECHNOLOGY:	3 INCH SILICON
POSITION SENSITIVE:	1 axis
N <sup>o</sup> of DETECTORS:	1 or 2
ACTIVE AREA:	50 x 10 mm <sup>2</sup>
CAPITANCE (FD):	40 – 20 pF/cm subject to depletion depth
INTER ANODE RESISTANCE:	4 KΩ minimum – 10 KΩ maximum
ENTRANCE/EXIT WINDOW:	0.2 μm
THICKNESS:	35 μm, 65 μm, 140 μm, 300 μm, 500 μm and 1000 μm
ALPHA RESOLUTION:	0.5 %
POSITON RESOLUTION:	100 μm -300 μm subject to readout electronics.
OPERATING VOLTAGE:	10 – 250 V subject to thickness chosen
PACKAGES:	PCB only or in metal frame with connector Single sided detector 60 x 41 x 10 mm <sup>3</sup> Double sided detector 60 x 46 x 13 mm <sup>3</sup> Inter Active Area Spacing 3 mm  Design also available in a UHV package design
CONNECTORS:	Conhex / 3 per detector unless PCB only

**TYPICAL PERFORMANCE**

DESIGN:	T-300 μm
FULL DEPLETION FD:	30 V
LEAKAGE CURRENT @ FD:	50 nA
ALPHA (1 μm)	28 KeV
NOISE (1 μm)	23 KeV
INTER ANODE RESISTANCE:	5 KΩ
PACKAGE:	Ceramic

NOTE: See also Design Series TT, position sensitive detectors (PSD) 18 x 10 mm<sup>2</sup>.

QUALITY ASSURANCE :ISO9001

