

SPECIALIST DETECTORS FOR NUCLEAR PHYSICS

SILICON DETECTOR TYPE:	TOTALLY DEPELTED SINGLE SIDED MICROSTRIP
DESIGN:	Silicon planar ion implanted structure p on n silicon totally depleted with over voltage depletion capability. The design is based on equal length channels using 4 inch silicon. Operation voltage is depletion depth and silicon resistivity dependent.
TECHNOLOGY:	4 INCH SILICON
ACTIVE AREA:	77 x 57 mm ²
ELEMENT LENGTH:	57 mm
ELEMENT PITCH:	300 µm
ELEMENTWIDTH:	250 µm
ELEMENT SEPARATION:	50 µm
THICKNESS:	65 µm, 140 µm, 300 µm and 500 µm
OPERATING VOLTAGE:	10 – 100 V subject to thickness selection
ELEMENT CAPACITANCE:	10 pF
ELEMENT DARK CURRENT:	30 nA typically, 100 nA maximum
NOISE PER ELEMENT:	10 KeV
CONTACTING METALLISATION:	Aluminum 8000 Å both sides
MINIMUM ACCEPTANCE LEVEL:	98 %
PACKAGE:	PCB 130 x 130 mm ²
FAN OUT:	Flexible Kapton on two sided 160 x 160 mm
CONNECTORS:	Connei – Part N ^o 00274030105
EXPERIMENTS SUPPLIED:	FERMILAB E2687 Photon tagging detector SLAC University of Southampton

QUALITY ASSURANCE :ISO9001

