

**SPECIALIST DETECTORS FOR NUCLEAR PHYSICS**

SILICON DETECTOR TYPE:	SINGLE SIDED DC ORTHOGONAL STRIP DETECTOR	
TECHNOLOGY:	3INCH SILICON	
DESIGN:	Ion implanted totally depleted 3 multi element space qualified structures. Large 36 mm active area. Two designs with orthogonal readouts. VV1 with interstrip resistors operating on 4 outputs and VV2 with 10 outputs without resistors.	
EXPERIEMNT:	NASA EPACT/WIND/CGS	NASA EPACT/LEMT
PART DESIGNATION:	<b>VV1</b>	<b>VV2</b>
ACTICE AREA:	36 cm <sup>2</sup>	36 cm <sup>2</sup>
N <sup>o</sup> of ELEMENTS:	250	10 (5 /side)
ELEMENT WIDTH:	4.5 mm typically	
N <sup>o</sup> of OUTPUTS:	4	10
INTERSTRIP RESISTANCE:	200 K	1 M
(Ohmic Side)		
CROSSTALK:	1 % typically, 2 % maximum	
READOUT:	100 %	
THICKNESS:	140 μm	1000 μm
THICKNESS UNIFORMITY:	± 3 μm	
FULL DEPLETION (FD):	20 V typically, 40 V maximum	150 V typically, 225 V maximum
OPERATING VOLTAGE:	FD to FD +25 V	
TOTAL LEAKAGE CURRENT:	3 μA typically, 5 μA maximum	
RESPONSE TIME:	20 ns typically, 50 ns maximum	
ALPHA RESOLUTION:	150 KeV typically, 250 KeV maximum	
Am 241 (5.48 MeV)		
METALLISATION:	3000 Å	
METALLISATION TOLERANCE:	± 1000 Å	
OXIDE EDGE WIDTH:	1 mm	
PACKAGE:	Detector chip assembly and double wire bonded positions	
TYPE OF PACKAGE:	PCB in Test housing with SMAs	
CONTACTS:	PAD	
CONNECTOR:	Vertical Pins	
OPERATING TEMPERATURE RANGE:	-40 to +35°C	
SPACE QUALIFIED:	Random vibration/temperature cycling/stability test	
OPERATING ENVIRONMENT:	Vacuum	
MIMIMUM ACCEPTANCE LEVEL:	100 % (All elements meeting specification)	

QUALITY ASSURANCE :ISO9001

