

PSDs POSITION SENSITIVE DETECTORS

ONE DIMENSIONAL Si-PSDs

STANDARD PSD

Position non-linearity $\pm 0.1\%$
 Detector resistance 50 kohm

Part-No.	Active area (mm)	Leakage current (nA)	Noise current (pA/Hz)	Capacitance (pF)	Rise time (10 – 90%) (μ s)	Standard package
1L2.5 CP2	2,5x0,6	2	0,4	1,6	0,03	14-pin DIL
1L2.5 CP1	2,5x0,6	2	0,4	1,6	0,03	4-pin DIL
1L5 CP2	5,0x1,0	4	0,4	5	0,05	14-pin DIL
1L5 CP1	5,0x1,0	4	0,4	5	0,05	4-pin DIL
1L10 CP2	10x2	8	0,4	15	0,2	14-pin DIL
1L10 SU70	10x2	8	0,4	15	0,2	SMD
1L20 CP3	20x3	60	0,5	45	0,5	22-pin DIL
1L30 SU2	30x4	150	0,7	90	1	Substrate
1L45 SU69	45x3	110	0,4	105	2,7	Substrate
1L60 SU34	60x3	150	0,4	135	4,5	Substrate

PSD WITH STRAY-LIGHT ELIMINATION

Position non-linearity $\pm 0.1\%$
 Detector resistance 200 kohm

Part-No.	Active area (mm)	Leakage current (nA)	Noise current (pA/Hz)	Capacitance (pF)	Rise time (10 – 90%) (μ s)	Standard package
1L5NT CP1	5x0,25	4	0,3	5	0,25	4-pin DIL
1L5NT CP2	5x0,25	4	0,3	5	0,25	14-pin DIL
1L10NT CP2	10x0,5	8	0,3	15	0,7	14-pin DIL

PSD WITH ENHANCED UV RESPONSE

Part-No.	Active area (mm)	Leakage current (nA)	Noise current (pA/Hz)	Capacitance (pF)	Rise time (10 – 90%) (μ s)	Standard package
1L2,5UV CP2	2,5x0,6	2	0,4	1,6	0,03	14-pin DIL
1L5UV CP2	5x1	4	0,4	5	0,05	14-pin DIL
1L10UV CP2	10x2	8	0,4	15	0,2	14-pin DIL
1L20UV CP3	20x3	50	0,5	45	0,5	14-pin DIL
1L30UV SU2	30x4	150	0,5	90	1	Substrate

COMMON DATA FOR ALL SITEK PSDs:

Thermal drift, typical 20 ppm/°C for 1L-series and 40 ppm/°C for 2L-series
 Bias voltage 5-20 V
 Maximum operating temp. 70°C
 Maximum storage temp. 100°C

The device specification data are measured under the following conditions:

Bias= 15 V, Temperature 23°C

Position non-linearity and thermal drift are measured within 80% of the detector length. Thermal drift is measured from 23°C to 70°C. All values are typical unless otherwise stated. For detailed data, please refer to individual data sheets.



TWO DIMENSIONAL Si-PSDs

STANDARD PSDs

Position non-linearity $\pm 0.3\%$
 Detector resistance 10 kohm

Part-No.	Active area (mm)	Leakage current (nA)	Noise current (pA/Hz)	Capacitance (pF)	Rise time (10 – 90%) (μ s)	Standard package
2L2 MP1	2x2	50	1,3	7	0,03	TO-8
2L2 CP4	2x2	50	1,3	7	0,03	4-pin ceramic
2L4 MP1	4x4	50	1,3	20	0,08	TO-8
2L4 CP5	4x4	50	1,3	20	0,08	4-pin ceramic
2L4 SU71	4x4	50	1,3	20	0,08	SMD
2L10 SU7	10x10	100	1,3	90	0,4	Substrate
2L10 CP6	10x10	100	1,3	90	0,4	4-pin ceramic
2L10 SU72	10x10	100	1,3	90	0,4	SMD
2L20 SU9	20x20	200	1,5	360	1,6	Substrate
2L20 CP7	20x20	200	1,5	360	1,6	4-pin ceramic
2L45 SU24	45x45	400	1,5	1600	7,0	Substrate

PSD WITH ENHANCED UV RESPONSE

Part-No.	Active area (mm)	Leakage current (nA)	Noise current (pA/Hz)	Capacitance (pF)	Rise time (10 – 90%) (μ s)	Standard package
2L2UV MP1	2x2	50	1,3	7	0,03	TO-8
2L4UV MP1	4x4	50	1,3	20	0,08	TO-8
2L10UV SU7	10x10	100	1,3	90	0,4	Substrate
2L20UV SU9	20x20	200	1,5	360	1,6	Substrate

SITEK SPC-PSD (SIGNAL PROCESSING CIRCUIT)

In order to facilitate the operation of our PSDs, we have developed a dedicated signal processing circuit. All components necessary to obtain the sum and difference signals from a two- or one-dimensional PSD have been concentrated on a 20,5 x 20,5 mm² thick film substrate.

The SPC comes complete with below PSD chips or any of our one dimensional PSDs.

OUR STANDARD SPC-PSD

Part-No.	Active area (mm)
1L2,5_SU74_SPC01	2,5x0.6
1L5_SU74_SPC01	5x1
1L10_SU74_SPC01	10x2
2L2_SU75_SPC01	2x2
2L4_SU66_SPC01	4x4
2L10_SU65_SPC01	10x10

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