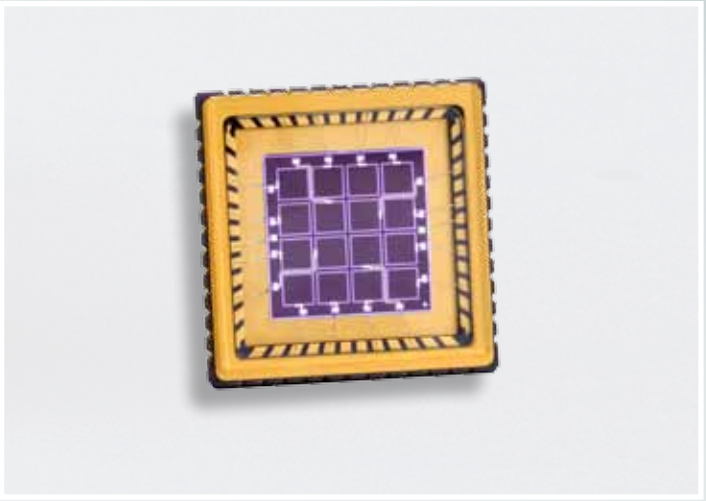
The **PIN-4X4D** is a 4 by 4 array of superblue enhanced Photodetectors. Our proprietary design provides virtually complete isolation between all of the 16 elements. The standard LCC package allows easy integration into your surface mount applications. Numerous applications include Ratio and Scattering measurements, as well as Position Sensing. For custom packages, special electro-optic requirements, or to order these parts in die form, please contact our Applications group.



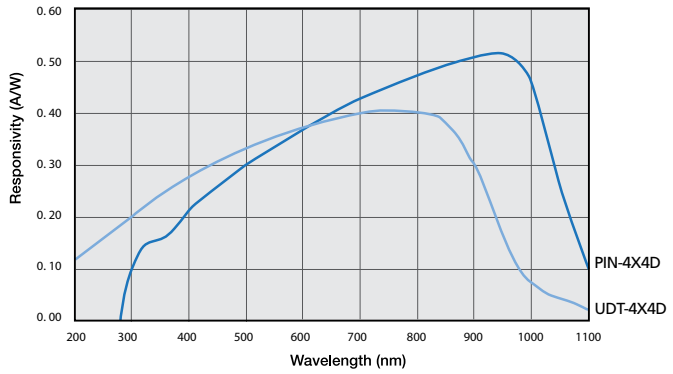
APPLICATIONS

- Scattering Measurements
- Position Sensing

FEATURES

- Speedy Response
- Extremely Low Cross-talk
- Surface Mount Design

Typical Spectral Response



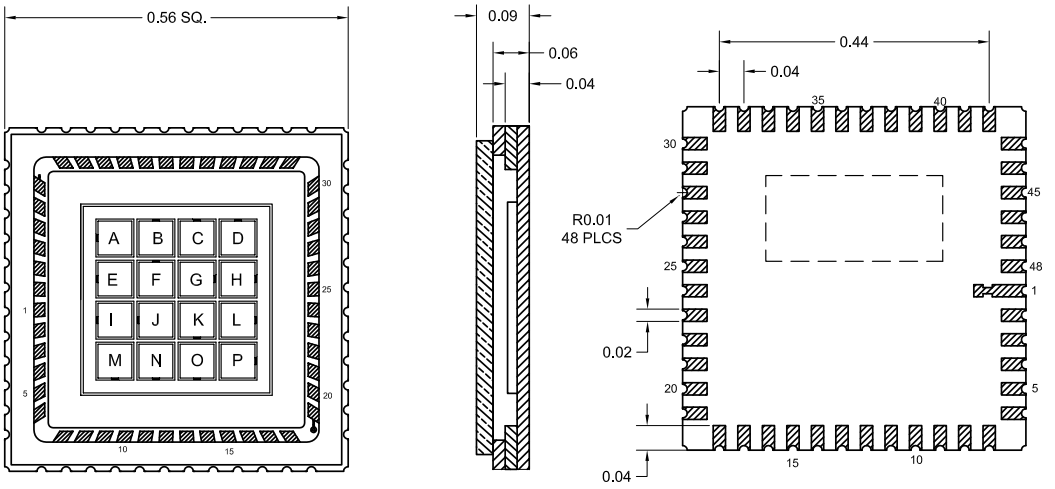
Model Number	Active Area		Peak Responsivity Wavelength	Responsivity (A/W)		Capacitance (pF)	Shunt Resistance (MΩ)		NEP (W/√Hz)	Crosstalk	Temp. Range (˚C)		Package Style ¶
	Area (mm^2)	Dimensions (mm)	λp nm	632nm		0 V	-10 mV		0 V 632nm 0 V 810nm*	0 V 632nm	Operating	Storage	
			typ.	min.	typ.	typ.	min	typ.	typ.	typ.			
4 x 4 Array Detectors													
PIN-4X4D	1.96	1.4 x 1.4	850	---	0.35	75	50	0.01	5.2e-14	1	-20 ≈ +60	-20 ≈ +80	Ceramic LCC
UDT-4X4D*	1.0	1.0 x 1.0	810	0.35	0.40	35	1.0	0.01	1.0e-14*	0.02%	-20 ≈ +60	-20 ≈ +80	Ceramic LCC

- Non-condensing temperature and storage range, Non-condensing environment.
- All Electro-Optical specifications are given on a per element basis.
- UDT-4X4D: NEP tested at 810nm*

Mechanical Specifications

4x4 Silicon Array Detectors

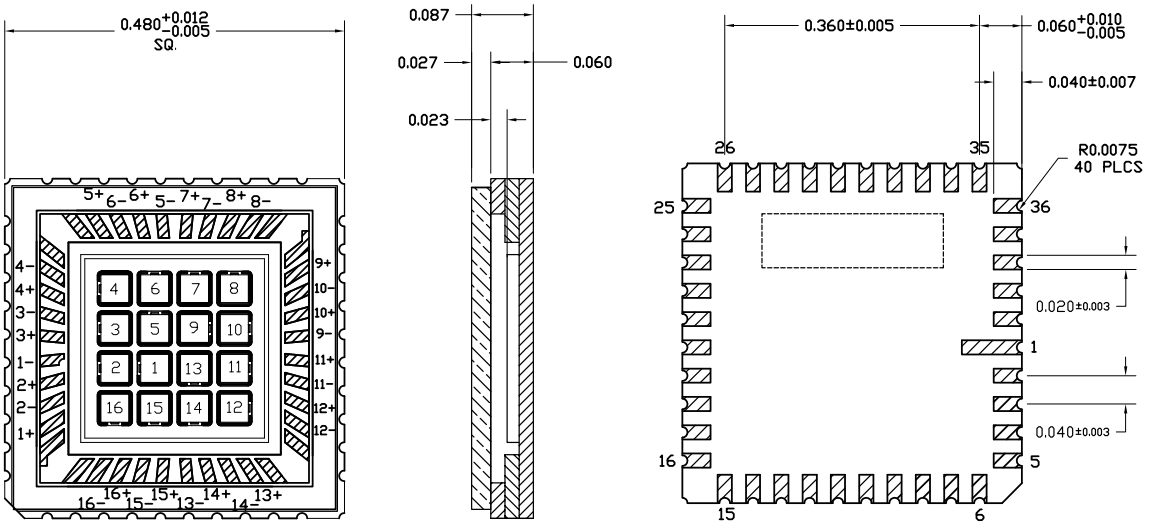
PIN-4X4D



Top views are shown without window

All units in inches.

UDT-4X4D



Top views are shown without window

All units in inches.

Mechanical Drawings

Mechanical Specifications and Die Topography

1. Parameter Definitions:

A = Distance from top of chip to top of glass.
a = Photodiode Anode.
B = Distance from top of glass to bottom of case.
c = Photodiode Cathode
(Note: cathode is common to case in metal package products unless otherwise noted).
W = Window Diameter.
F.O.V. = Filed of View (see definition below).

2. Dimensions are in inches (1 inch = 25.4 mm).

3. Pin diameters are 0.018 ± 0.002" unless otherwise specified.

4. Tolerances (unless otherwise noted)

General: 0.XX ±0.01"
0.XXX ±0.005"
Chip Centering: ±0.010"
Dimension 'A': ±0.015"

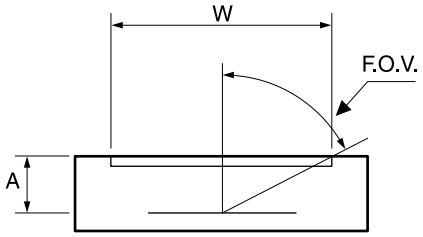
5. Windows

All **'UV'** Enhanced products are provided with QUARTZ glass windows, 0.027 ± 0.002" thick.

All **'XUV'** products are provided with removable windows.

All **'DLS'** PSD products are provided with A/R coated glass windows.

All **'FIL'** photoconductive and photovoltaic products are epoxy filled instead of glass windows.



$$F.O.V. = \tan^{-1}\left(\frac{W}{2A}\right)$$

For Further Assistance
Please Call One of Our Experienced
Sales and Applications Engineers

Optoelectronics
An OSI Systems Company

- Or -
visit our website at
www.osioptoelectronics.com