



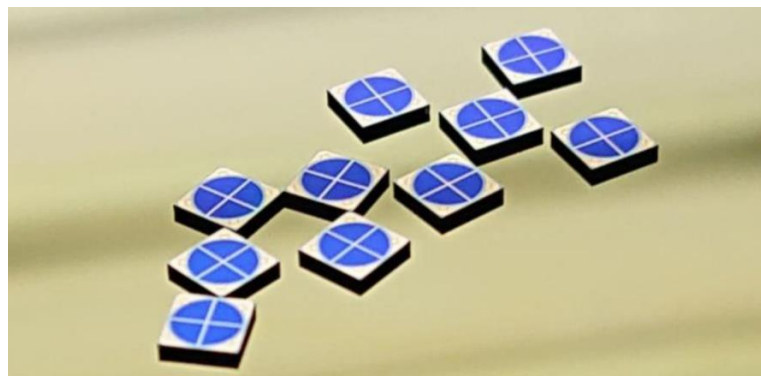
InGaAs Quadrant PIN Photodiode Chip (1.7- μm Wavelength Cutoff)

FEATURES

- Highly Reliable Planar Device
- Low Leakage Current
- High Shunt Resistance
- High Responsivity
- Low Stray Absorption

APPLICATIONS

- Light Detection and Ranging (LIDAR)
- Beam Alignment
- Light Spot Position Detection
- Remote Optical Control



GENERAL DESCRIPTIONS

PARAMETER	UNIT	VALUE
Spectral Range	μm	0.9 - 1.7
Aperture Size / Active Area	$\mu\text{m}/\text{mm}^2$	\varnothing 1860 / 0.625 x 4
Gap	μm	75
Chip Dimensions		
Length	μm	2055 \pm 15
Width	μm	2055 \pm 15
Thickness	μm	300 \pm 20



SPECIFICATIONS ($T_{AMB} = 23\text{ }^{\circ}\text{C}$)

PARAMETER	UNIT	MIN.	TYP.	MAX.
Spectral Range ¹	μm	0.9 – 1.7		
Dark Current @ -5 V	nA	---	0.5	5
Capacitance @ 1 MHz				
@ 0 V	pF	---	140	170
@ -5 V		---	70	85
3dB Bandwidth @ -5 V, 50 Ω	MHz	25	30	---
Responsivity @ 0 V				
@ 0.85 μm	A/W	0.1	0.2	---
@ 1.30 μm		0.85	0.90	---
@ 1.55 μm		0.95	1.00	---
Saturation Power ² @ 1.55 μm , 0 V, -0.2 dB	mW	3.0	4.5	---

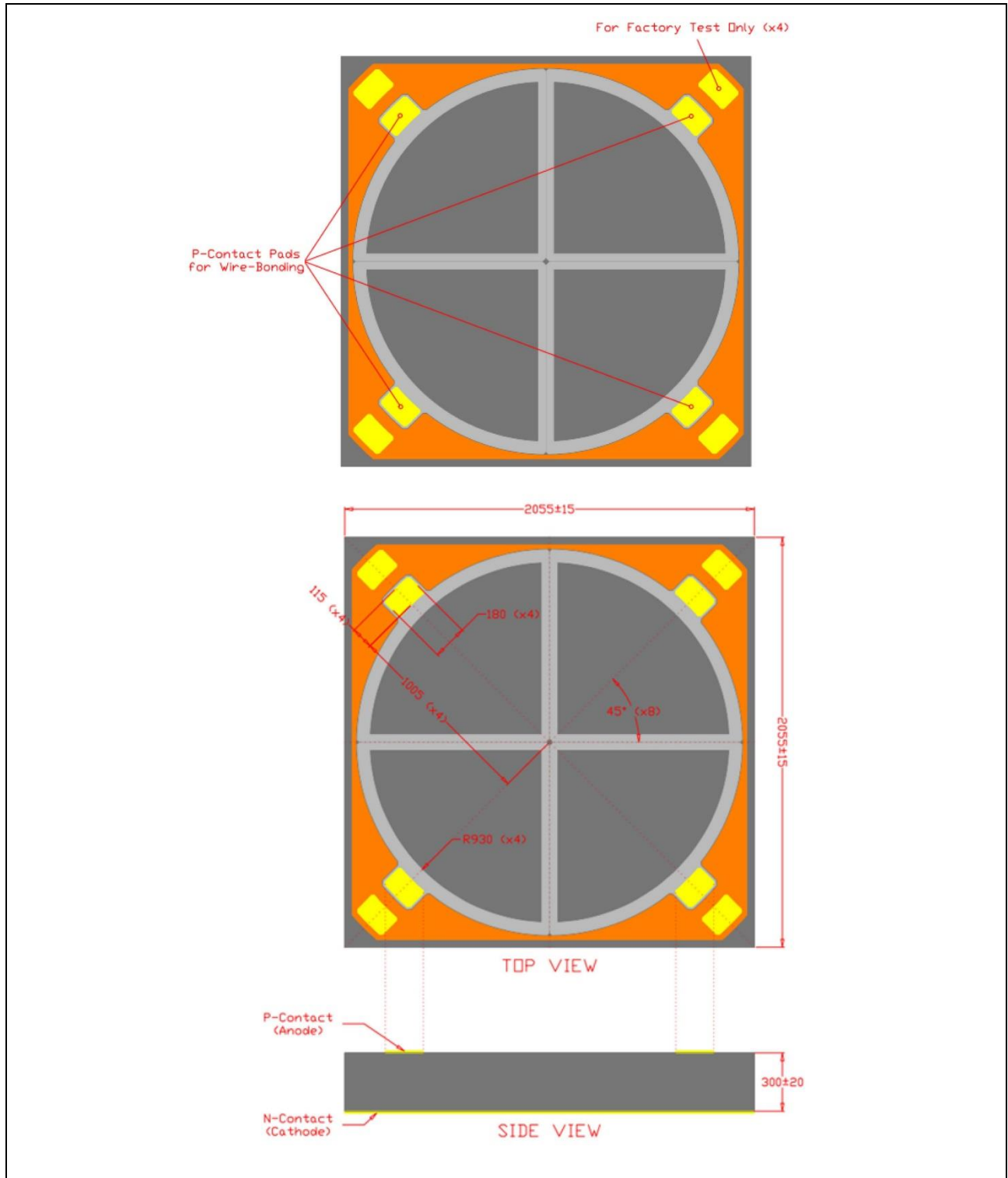
- 1) 1.2 -2.2 μm wavelength range is also available. Please contact us for further Information.
2) Measured at the aperture center with a 1/e² beam diameter of 250 μm .

ABSOLUTE MAXIMUM RATINGS ($T_{AMB} = 23\text{ }^{\circ}\text{C}$)

PARAMETER	UNIT	MIN.	MAX.
Reverse Voltage	V	---	10
Reverse Current	mA	---	10
Forward Current	mA	---	10
Operating Temperature	$^{\circ}\text{C}$	- 40	+ 85
Storage Temperature	$^{\circ}\text{C}$	- 40	+ 85



CHIP DIAGRAM (Unit: μm)



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