

APX-NG0031QPD-L

InGaAs Quadrant Photodiode



FEATURES

- Hermetically sealed
- A/R coated window glass at 1550nm
- 0.01mm Element Gap
- Meets NASA Low Outgassing Standards

APPLICATIONS

- Positioning
- Beam centering

DESCRIPTION

The **APX-NG0031QPD-L** is a 2mm diameter active area InGaAs quadrant photodetector mounted in a hermetic surface mount leadless chip carrier with an Anti-Reflective coated window at 1550nm sealed with low outgassing epoxy.

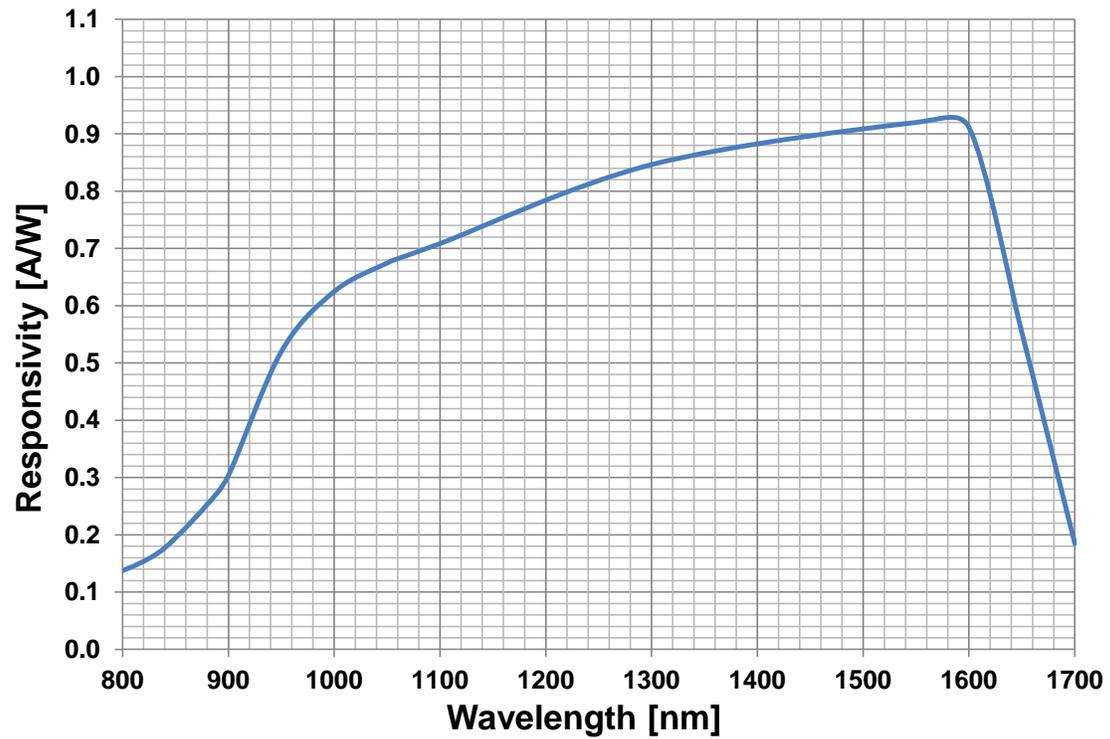
> Absolute Maximum Ratings

Part No.	Wavelength Range [nm]	Reverse Voltage [V]	Operating Temperature [C]	Storage Temperature [C]	Package
APX-NG0031QPD-L	900 to 1700	10	-40 to +75	-40 to +100	SMD

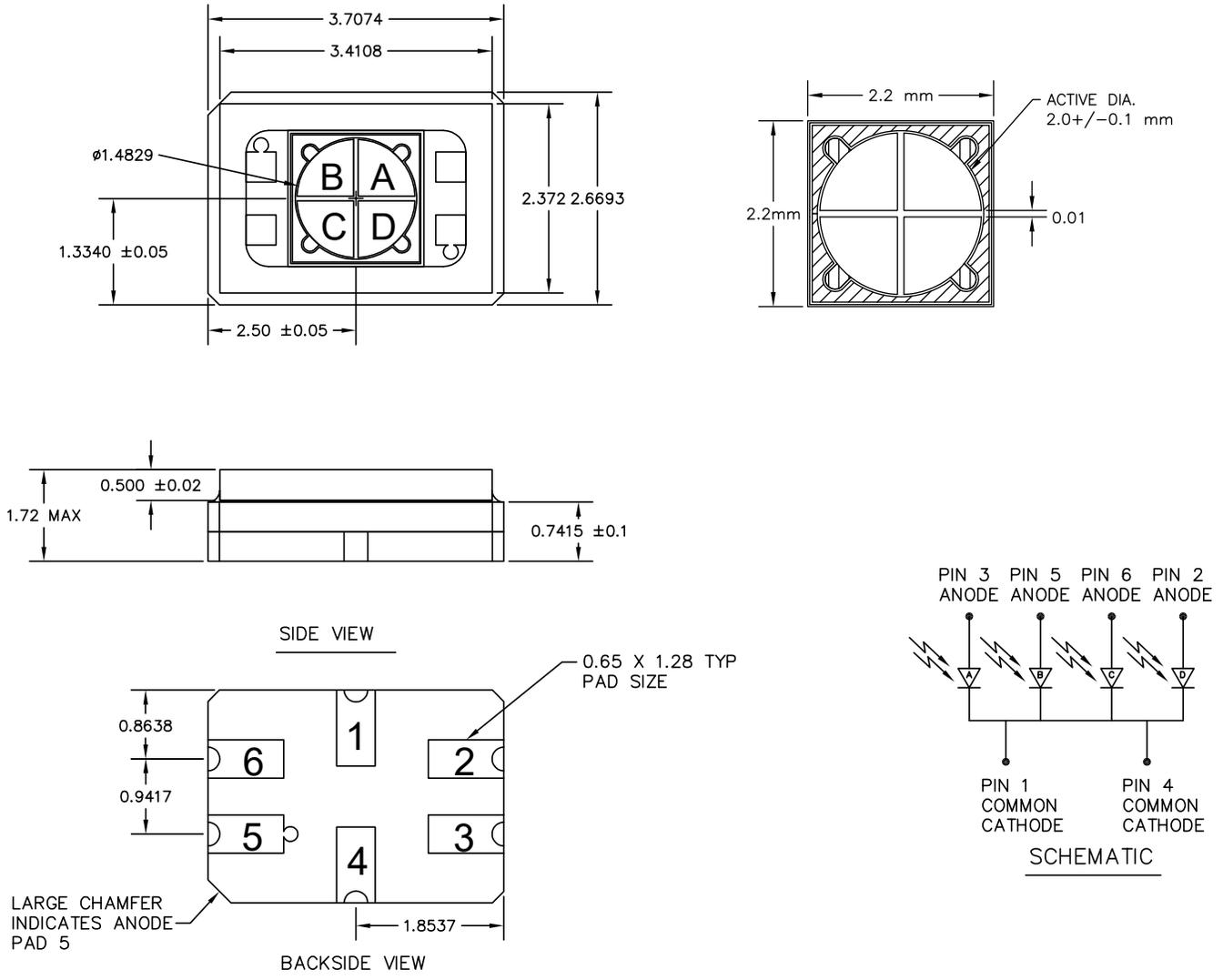
> Electrical-Optical Characteristics

Typical Characteristics per element (T=23°C unless specified)						
Parameter	Test Conditions	Symbol	Min	Typical	Max	Unit
Active Area Diameter	Circular active area	A.A.	-	2	-	mm
Element Gap	-	-	-	0.01	-	mm
Dark Current	$V_R = 5\text{ V}$	I_D	-	0.8	10	nA
Shunt Resistance	$V_R = 10\text{ mV}$	R_{sh}	20	100	-	MΩ
Junction Capacitance	$V_R = 0\text{V}; f = 1\text{ MHz}$	C_J	-	-	200	pF
Responsivity	$\lambda = 1550\text{nm}, V_R = 0\text{ V}$	R	0.97	1	-	A/W
Breakdown Voltage	$I = 10\text{ }\mu\text{A}$	V_{BR}	10	-	-	V
Element Crosstalk	$V_R = 1\text{ V}, \lambda = 1550\text{nm}$	C_L	-	-	1	%
Noise Equivalent Power	$\lambda = 1550\text{nm}$	NEP	-	2×10^{-14}	6×10^{-14}	$\text{W}/\text{Hz}^{0.5}$

> Typical Spectral Response



> Package Dimensions
in mm



> Soldering Conditions: 260°C for 3 seconds max.

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MATERIALS SAFETY

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