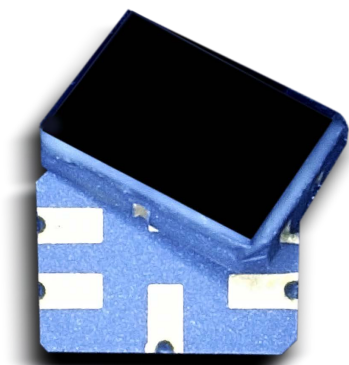


## APX-NG0031QPD-BP 1100-1700nm Bandpass InGaAs Quadrant Photodiode



### FEATURES

- Hermetically sealed
- Silicon Window blocks light below 1100nm
- 0.03mm Element Gap
- Meets NASA Low Outgassing Standards

### APPLICATIONS

- Positioning
- Beam centering

### DESCRIPTION

The **APX-NG0031QPD-BP** is a 2mm diameter active area InGaAs quadrant photodetector mounted in a hermetic surface mount leadless chip carrier with an Anti-Reflective coated Silicon window sealed with low outgassing epoxy. The silicon window filters out wavelengths shorter than 1100nm, blocking visible and NIR light.

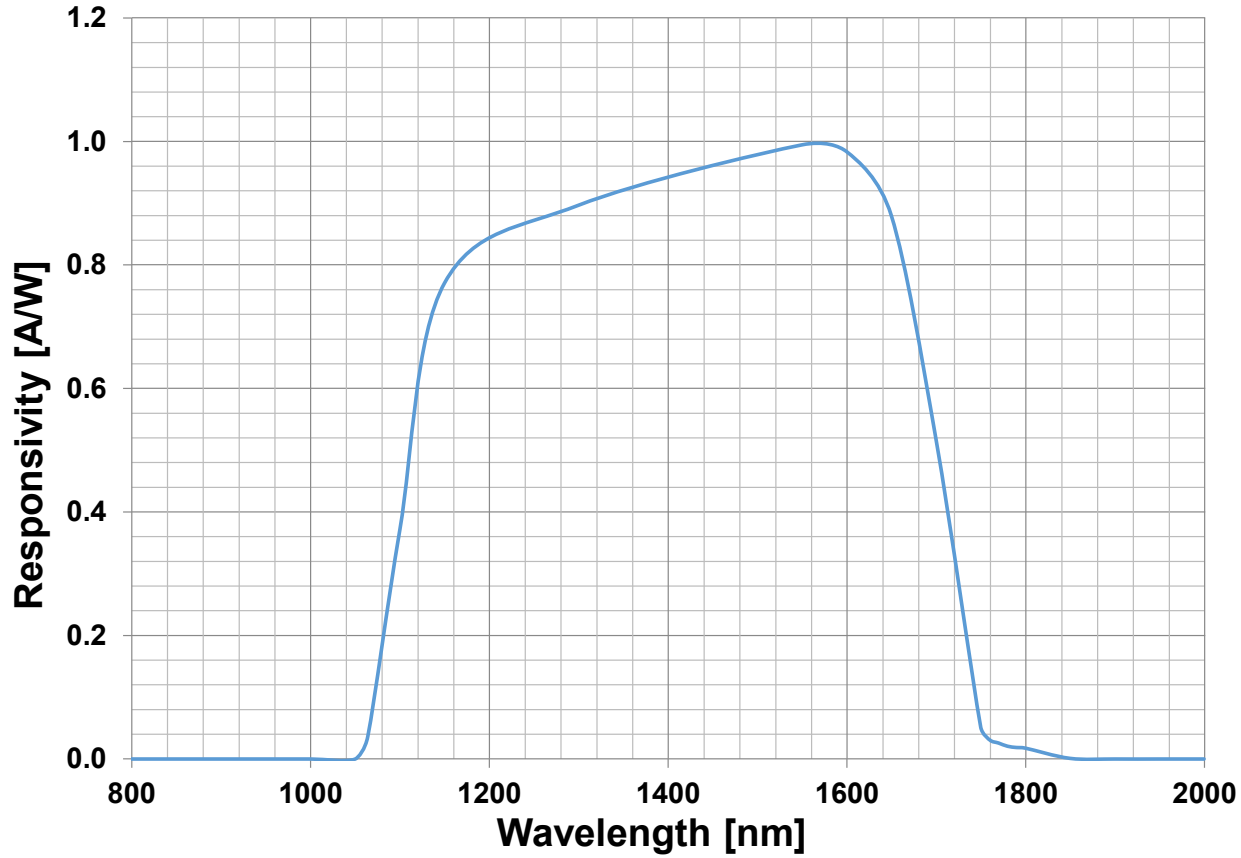
#### > Absolute Maximum Ratings

Part No.	Wavelength Range [nm]	Reverse Voltage [V]	Operating Temperature [C]	Storage Temperature [C]	Package
APX-NG0031QPD-BP	1100 to 1700	10	-40 to +75	-40 to +100	SMD

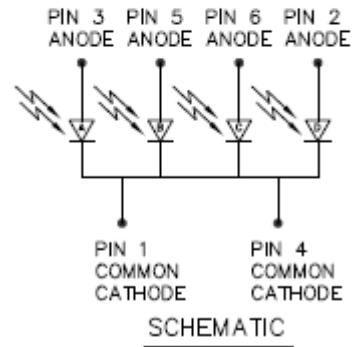
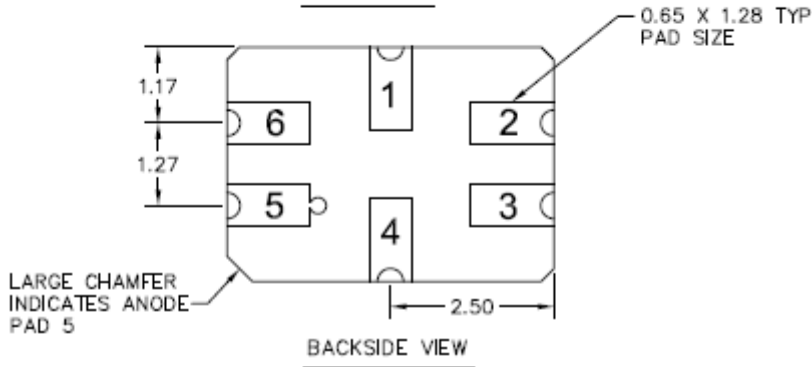
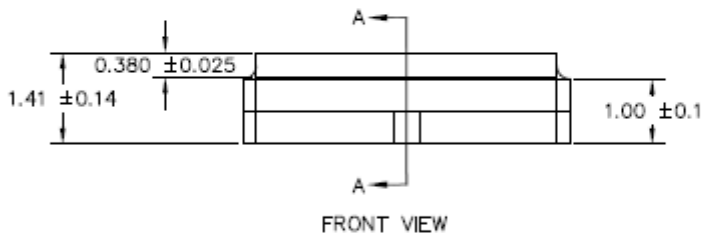
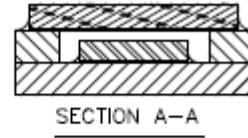
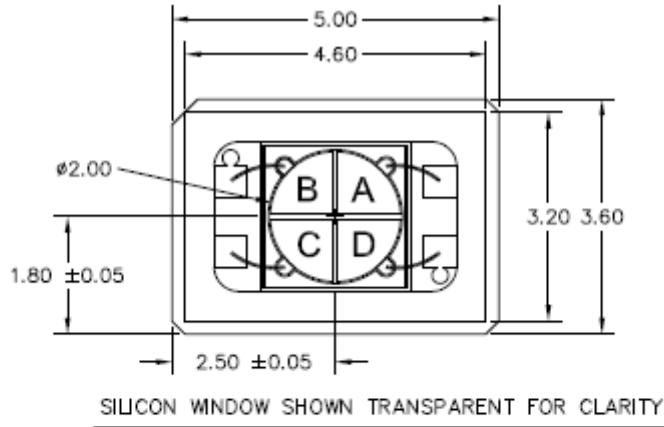
#### > Electrical and Optical Characteristics

Typical Characteristics per elements (T=23°C unless specified)						
Parameter	Test Conditions	Symbol	Min	Typical	Max	Unit
Active Area Diameter	Circular active area	A.A.	-	2	-	mm
Gap Between Elements	-	-	-	0.03	-	mm
Dark Current	$V_R = 5\text{ V}$	$I_D$	-	0.8	10	nA
Shunt Resistance	$V_R = 10\text{ mV}$	$R_{sh}$	40	100	-	MΩ
Capacitance	$V_R = 0\text{V}; f = 1\text{ MHz}$	$C_J$	-	-	125	pF
Responsivity	$\lambda = 1550\text{nm}, V_R = 0\text{ V}$	$R$	0.97	1	-	A/W
Breakdown Voltage	$I = 10\ \mu\text{A}$	$V_{BR}$	10	-	-	V
Element Crosstalk	$V_R = 1\text{ V}, \lambda = 1550\text{nm}$	$C_L$	-	-	2	%
Noise Equivalent Power	$\lambda = 1550\text{nm}$	NEP	-	$2 \times 10^{-14}$	$6 \times 10^{-14}$	W/Hz <sup>0.5</sup>

## &gt; Typical Spectral Response



> Package Dimensions in mm



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## MATERIALS SAFETY

*This product is free of conflict minerals and meets REACH compliance. Please see website for reports.*