

InGaAs Avalanche Photodiode (APD) with Integrated Lens, 10 Gbps(Chip-on-Carrier)

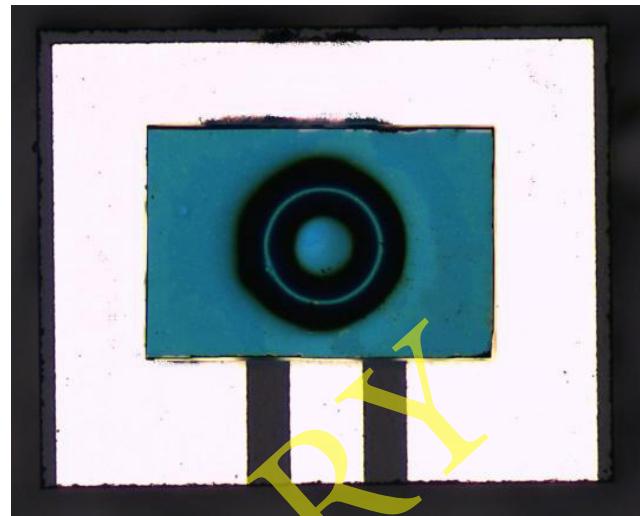
PDAB0022L-CC

Applications:

Long Haul Receivers
SONET/SDH Receivers

Features:

Ceramic sub-carrier
Integrated Lens
Planer Structure for High Reliability
1000 to 1625nm Spectral Response
Low Dark Current



Description:

Go!Foton's Avalanche Photodiode (APD) is suitable for 10 Gbps applications in optical communications. This InGaAs APD has a planer structure for high reliability. It has back illuminated structure. The optical signal goes through the integrated lens on the back surface.

Specifications:

Electro-Optical Characteristics:

Parameter	Min	Typ	Max	Conditions
Active Area Diameter (μm)		22		
Responsivity (A/W)	0.80			1.55 μm , M=1
Dark Current (nA)		50		0.9V _{br} , 25°C
Breakdown Voltage (V)	25	40		10 μA
Capacitance (pF)		0.3		1MHz, M=10
Frequency Response (GHz)	7			M=8, RL=50 Ω
Operating Voltage (V)		V _{br} -1		M=10
Punch-through Voltage (V)	12	V _{br} -7		
Temperature Coefficient of V _b (%/ $^{\circ}\text{C}$)		0.15		

1) Condition unless noted; 25°C, Pout =1uW

2) Punch-through voltage is defined as voltage where 1.5V above the voltage where the first deviation of IV curve under illumination shows local maximum.

3) Responsivity at punch-through voltage is defined as responsivity at M=1

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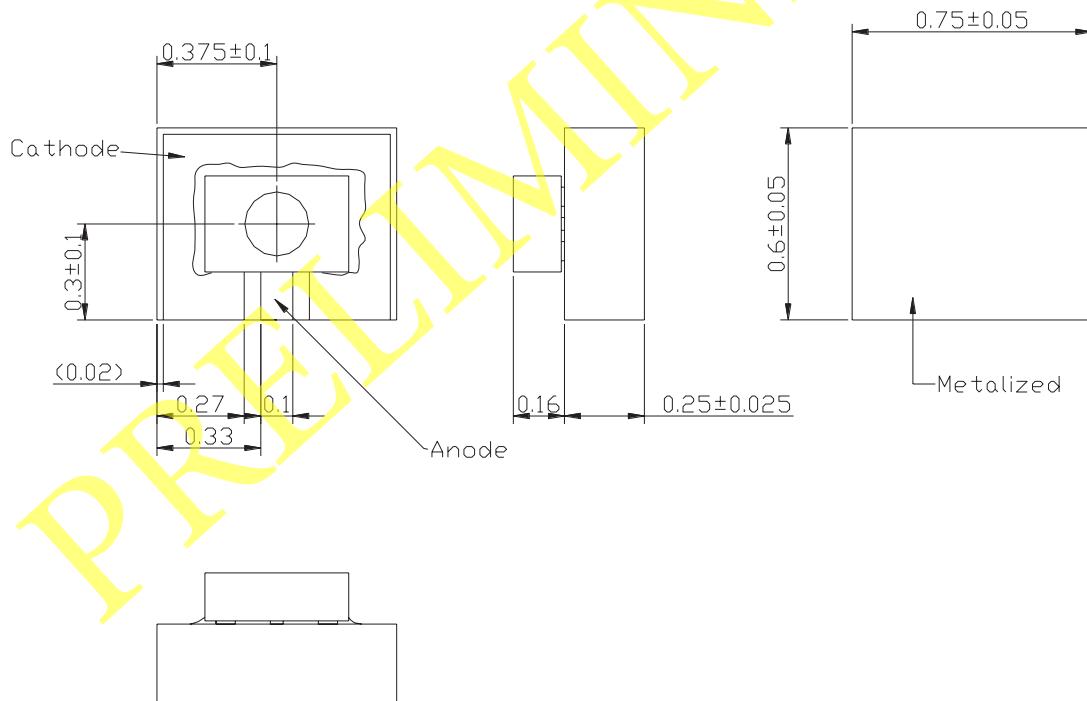
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Absolute Maximum Rating:

Parameter	Min	Typ	Max
Reverse Current (mA)		1	
Forward Current (mA)		1	
Maximum Input Power (mW)		0.5	
Operating Temperature ⁴⁾ (°C)	-40	85	
Storage Temperature ⁴⁾ (°C)	-40	85	

4) Operational or storage beyond these absolute maximum ratings cause permanent damage to the device.

Dimensions:



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