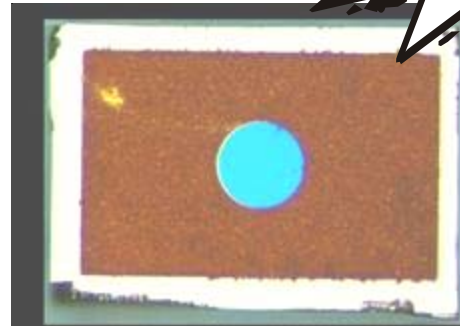


# InGaAs Avalanche Photodiode 10 Gbps



## Applications:

Long Haul Receiver  
SONET/SDH Add Drop Modules  
Optical Cross Connects



## Features:

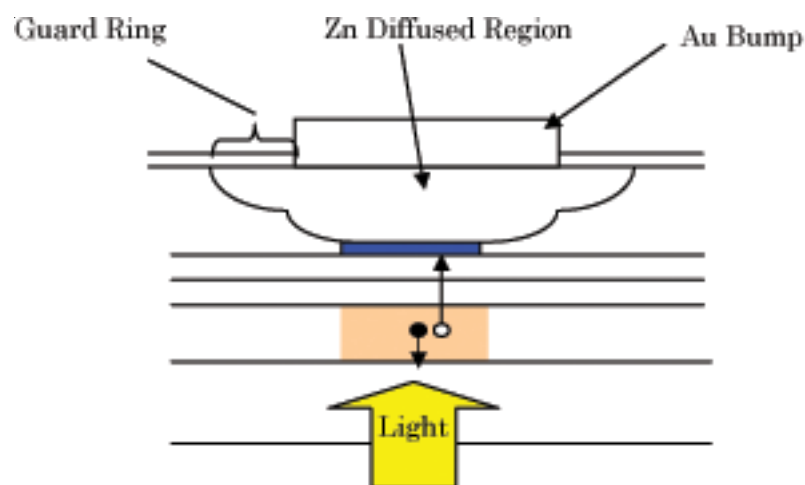
Ceramic sub-carrier  
Planer Structure for High Reliability

1000 to 1625nm Spectral Response  
Low Dark Current

## Description:

NSG's Avalanche Photodiode (APD) is suitable for 10 Gbps applications in optical communications. This InGaAs APD has a planer structure for high reliability. The optical signal goes through the aperture for a back illuminated structure.

## Schematic:



## Specifications:

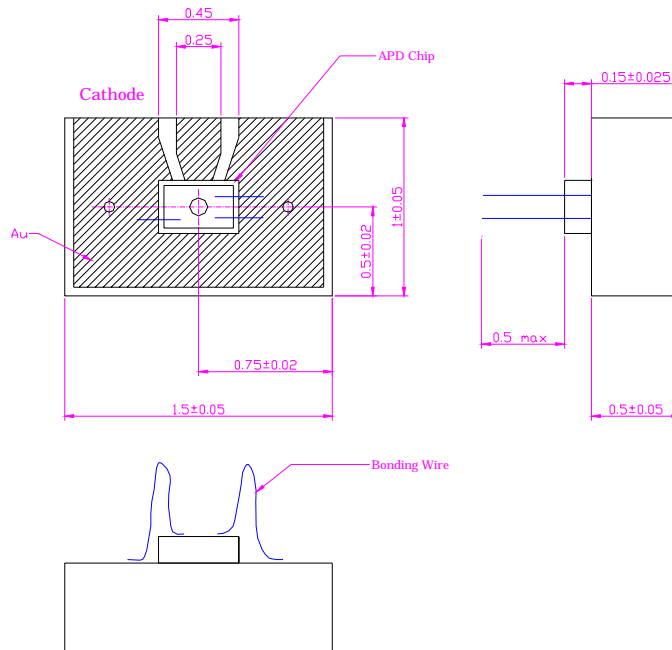
Parameter	Min.	Typ.	Max.
Active Area Diameter ( $\mu\text{m}$ )		22	
Responsivity (A/W)	0.80		
Dark Current (nA)			50
Breakdown Voltage (V)	25		35
Capacitance (pF)			TBD
Frequency Response (GHz)	7		
Operating Voltage (V)			TBD
Temperature Coefficient of $V_b$ ( $\%/^{\circ}\text{C}$ )			0.15

## Absolute Maximum Rating

Reverse Current ( $\mu\text{A}$ )	500		
Forward Current (mA)			1
Maximum Input Power (mW)			TBD
Operating Temperature ( $^{\circ}\text{C}$ )	0		+85
Storage Temperature ( $^{\circ}\text{C}$ )	-40		+85

Condition unless noted:  $25^{\circ}\text{C}$ ,  $P_{opt}=1\mu\text{W}$

## Dimension:



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**Nippon Sheet Glass Co., Ltd.** Sagami-hara, Japan  
 Tel. +81-42-775-1570 Fax +81-42-775-1578  
**NSG America, Inc.** Somerset, NJ USA  
 Tel. +1-732-469-9650 Fax +1-732-469-9654

**NSG Europe N.V./S.A.** Temse, Belgium  
 Tel. +32-3711-1009 Fax +32-3711-1534  
**NSG Hong Kong Co. Ltd.** Hong Kong  
 Tel. +852-2562-8263 Fax +852-2116-9086