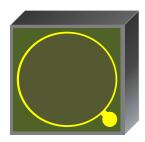
# GCS large Area InGaAs Monitor PIN PD

P/N: Do222 1mm P2





#### Introduction

The DO222\_1mm\_P2 product is a front side illuminated InGaAs large area monitor PIN photodiode that features a planar structure with anode contact on the front side and cathode contact on the backside. Designed with a large 1mm detection window, this product is primarily designed for various LD monitoring applications with excellent responsivity in the 980nm to 1620nm wavelength region.

## **Key Features**

- Planar structure on n+ InP substrate with top anode contact
- 1mm optical detection window optimized for LD monitoring
- Low operating bias voltage
- -40C to 85C operation range
- Customized chip dimension available
- Deliverable in GCS Known Good Die<sup>™</sup> with 100% testing and inspection
- RoHS compliant

## **Applications**

Large area LD monitoring

## SPECIFICATIONS (T=25C°)

	Conditions	Min.	Typical	Max.	Unit	Notes
Responsivity	@1310nm	0.8	0.9		A/W	
	@1550nm	0.9	0.95		A/W	
Capacitance	-5 V		60	70	pF	
Breakdown	1μΑ	20	-	-	V	
Dark current	-5V	-	1.5	10.0	nA	
Bandwidth		-	0.1	-	GHz	

### **ABSOLUTE MAXIMUM RATING**

Parameter	Rating		
Reverse Voltage	-20V		
Reverse Current	-10mA		
Forward Current	10mA		
Optical Power Input	10mW		
Operating Temperature	-40C to 85C		
Storage Temperature	-40C to 125C		
Soldering Temperature	320C / 5 sec		

# **Global Communication Semiconductors, LLC**

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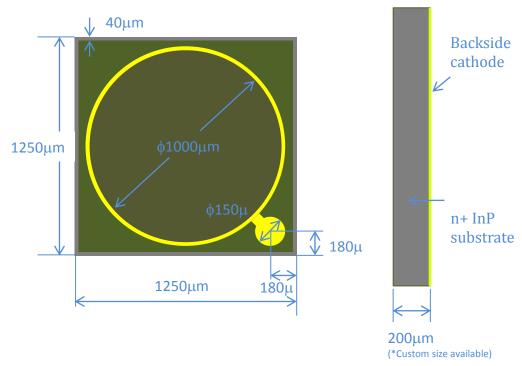
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Made in USA

#### **DIMENSIONS**

	Conditions	Min.	Typical	Max.	Unit	Notes
<b>Detection Window</b>			1000		μm	
Bonding pad diameter			150		μm	for p-pad
Metal height of bond pad			1.6	-	μm	Au metal
Die height		185	200	215	μm	
Die width		1235	1250	1265	μm	
Die length		1235	1250	1265	μm	
Backside n-metal						AuSn compatible



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Attention: Handle with care, InP is a brittle material. Avoid ESD; the device may be permanently damaged.

## **About GCS:**

GCS is a world-class semiconductor manufacturer specializing in advanced photodiode technologies. We provide advanced GaAs and InGaAs photodiodes of varying data rate and application to multiple top tier optical transceiver customers throughout the world. With over 15 years' experience and over 150 million units delivered, our state of the art manufacturing facility has the capacity to produce 2,000 (100mm) wafers per month.

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