



Introduction

This product is a front side illuminated InGaAs large area monitor PIN photodiode chip that features a planar structure with anode on front side and cathode on backside. This product has a large 500um detection window, with an excellent responsivity in the wavelength region from 980nm to 1620nm, mainly designed for various LD monitoring application.

Key Features

Applications

- Planar structure on n+ InP substrate with top anode contact
- 500um optical detection window optimized for LD monitoring
- Low operating bias voltage
- -40C to 85C operation range
- Deliverable in GCS Known Good Die[™] with 100% testing and inspection
- RoHS compliant
- Customized chip dimension available

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	-	12	15	pF	
Breakdown	1μA	20	-	-	V	
Dark current	-5V	-	1.0	2.5	nA	

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	-55C to 125C			
Soldering Temperature	320C / 5 sec			

Global Communication Semiconductors, LLC 23155 Kashiwa Court, Torrance, CA 90505 Tel: (310) 530-7274 Fax: (310) 517-8200 e-mail: info@gcsincorp.com www.gcsincorp.com

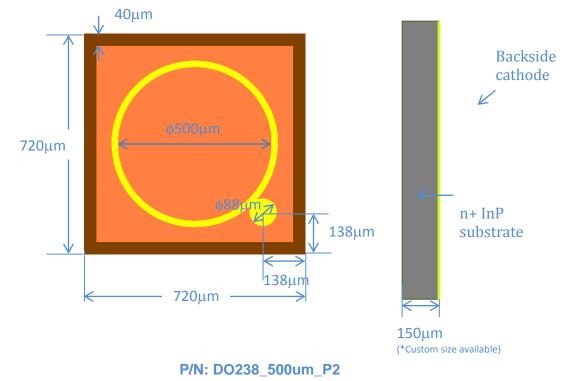
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• Large area LD monitoring



DIMENSIONS						Made in USA
	Conditions	Min.	Typical	Max.	Unit	Notes
Detection Window			500		μm	
Bonding pad diameter			88		μm	for p-pad
Metal height of bond pads			1.6	-	μm	Au metal
Die height		140	150	160	μm	
Die width		710	720	730	μm	
Die length		710	720	730	μm	



Attention: InP brittle material and electrostatic sensitive device, observe precaution for handling.

About GCS:

GCS has a long history manufacturing and shipping both GaAs and InGaAs based photo diodes since 2000. Our state of art manufacturing facility is located in Torrance, California, and has about 10,000 square feet of fab space with a capability of about 1200 4-inch wafers per month and expandable to 2000 wafers per month. GCS as a world-class semiconductor device manufacturer has been delivering a total of over 30 million photo diodes with various date rates and applications used for optical communications, which have been deployed in field by top tier optical transceiver companies worldwide.

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