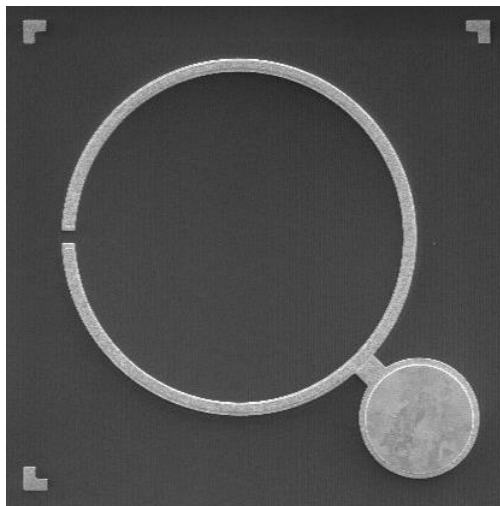


InGaAs mPD300 Chip

SPECIFICATION



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General Description

This mPD300 chip has very low dark current and capacitance. Using this chip an optical receiver with a high sensitivity is can be achieved.

Features

- Operation at 1000~1650nm
- Low dark current
- Low capacitance
- Linear response
- Low cost

Applications

- Optical power Monitoring
- Optical sensor

Absolute Maximum Ratings (Tc=25°C)

Parameter	Symbol	Rating	Unit
Reverse voltage	V_R	20	V
Reverse current	I_R	10	mA
Operating temperature range	T_{OPR}	-40 to +85	°C
Storage temperature range	T_{STG}	-40 to +85	°C

Table 1. Absolute Maximum Ratings

Electro-Optical Characteristics (Tc=25°C)

Parameter	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Dark current	I_D	$V_R = 5\text{ V}$		1	5	nA
Capacitance	C_{PD}	$V_R = 5\text{ V}$			10	pF
Responsivity	R	$V_R = 5\text{ V} (@1550\text{nm})$	0.9			A/W
Operating range	λ	-	1.0	-	1.65	μm

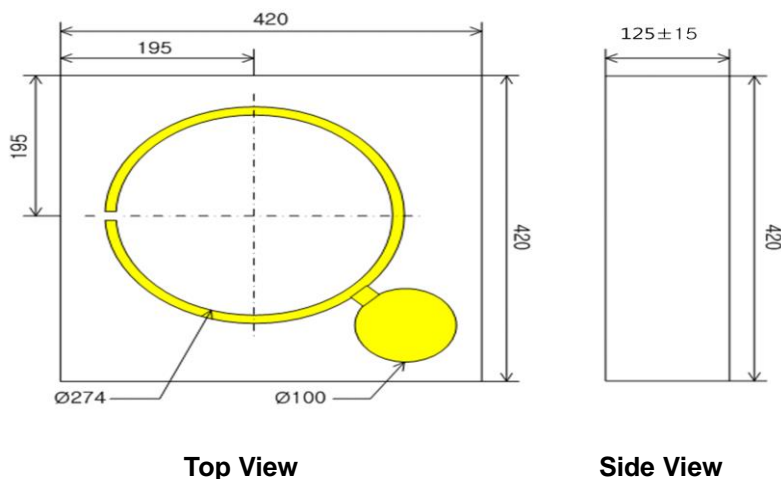
Table 2. Electro Characteristics

Structure

Dimension Parameter

Parameter	Symbol	Typ.	Unit
Light receiving area diameter	D	274	μm
Chip size	-	420×420	μm ²
Bonding pad diameter	-	100	μm
Chip thickness	t	125 ± 15	μm

Dimension



(unit: μm)

Other Requirements

Precautions for use

- 1) This device is susceptible to damage as a result of ESD(electrostatic discharge). Use of ground straps, anti static mats, and other standard ESD protective equipment is recommended when handling or testing an InGaAs PIN/APD or any other junction photodiode. Soldering temperature of the leads should not exceed 350°C for more than 3 seconds.

Ordering Information- PD CHIP

