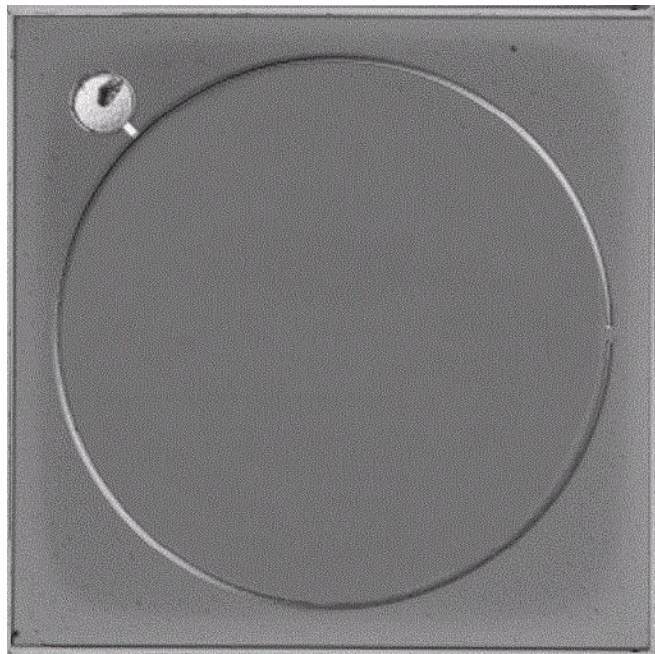


InGaAs PIN PD Chip with 1mm diameter

SPECIFICATION



Contents

General Description	3
Absolute Maximum Ratings	3
Electro-Optical Characteristics	3
Structure	4
Other Requirements	4

General Description

LAPD-1mm CHIP are designed to have a good linearity of responsivity to high power (+15dBm). In addition, by designing their shot noise and Jonson noise current to be lower, they enable users to reduce minimum detectable signal. Thus, they can be used for optical power meter for a wide input optical power range.

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	25	V
Reverse current	I_R	40	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	$V_R = 10\text{ V}$			100	nA
Capacitance	C_{PD}	$V_R = 5\text{ V}$		50	100	pF
Responsivity	R	$V_R = 3\text{ V}(@1550\text{nm})$	0.8	1.0		A/W
Operating range	λ	-	1.0	-	1.65	μm

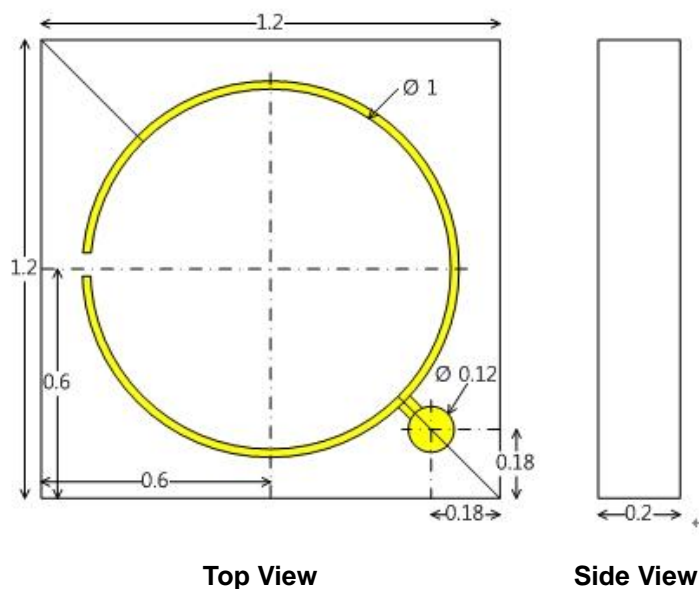
Table 2. Electro Characteristics

Structure

Dimension Parameter

Parameter	Symbol	Typ.	Unit
Light receiving area diameter	D	1	mm
Chip size	-	1.2x1.2	mm ²
Bonding pad diameter	-	0.12	mm
Chip thickness	t	0.2 ± 0.015	mm

Dimension



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

