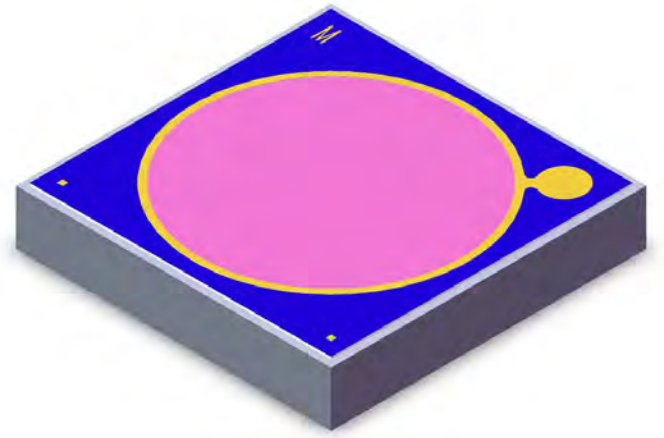
PD1000 InGaAs Photodiode Chip



Description:

LD-PD's InGaAs pin structure based on InP by MOCVD method and planar diffusing technology. The sensitive areas of TO photodiode series products are φ75μm、φ300μm、φ500μm、φ1mm、φ2mm、φ3mmrespectively. The products with other sensitive area, shape or package style can also be provided according to the demand of users.

Features:

- High Responsivity, front side illuminated， double-side pads
- Φ=1mm, round optical window
- Optimized for Machane(CH4) detection(1654nm), improving responsivity in low-temperature environment

Applications:

- Fiber communication
- Fiber sensor

Electro-Optical Characteristics:

Electro-Optical Specifications @ 22±3℃

Parameter	Test Condition	Min.	Typ.	Max.	Unit
Responsivity1	λ=1310nm	0.90	0.95	——	A/W
Responsivity2	λ=1550nm	0.95	1.00	——	A/W
Dark Current	V=-5V	——	0.8	3.0	nA
Breakdown Voltage	I=-10μA	40.0	——	——	V
Capacitance	V=-5V,f=1MHz	——	45	65	pF
Forward Voltage	I=1mA	——	0.43	0.70	V

Typical Linearity Performance Curves:

As shown in Figure 1 @ Vr=0V TC=22± 3℃

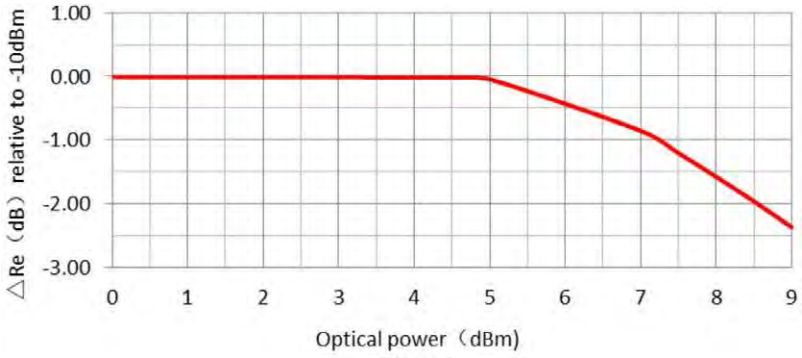


Figure 1

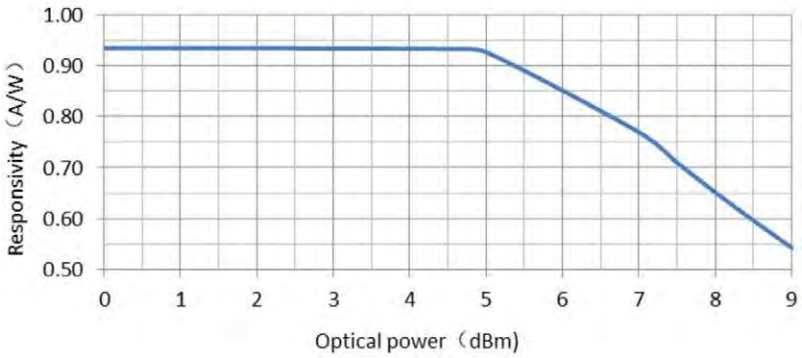
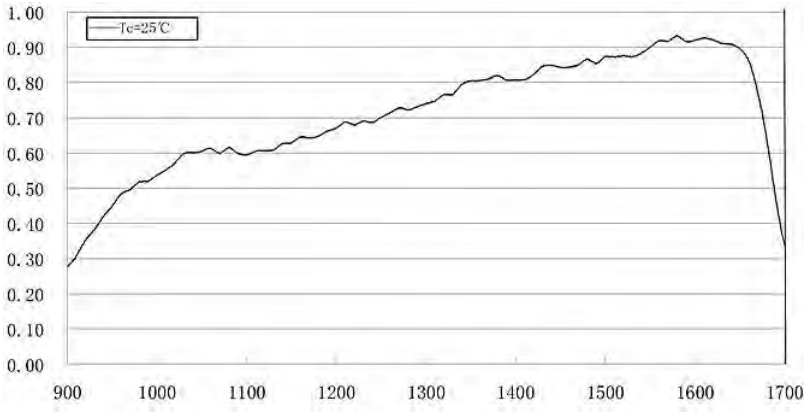


Figure 2

Responsivity, R (A/W):



Outline Diagram and Die Dimensions:

As shown in figure 1

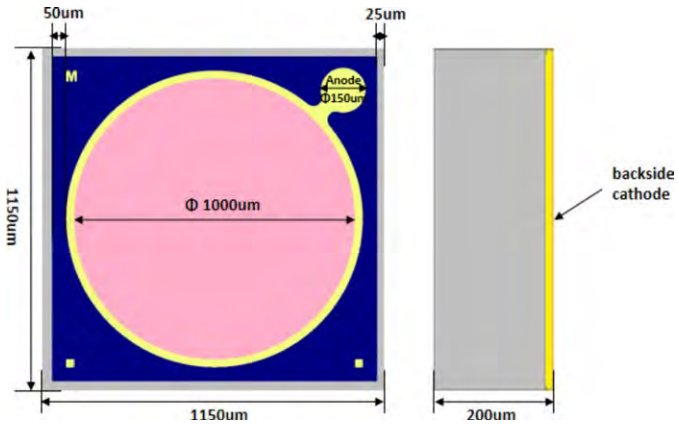


Figure 1

Parameter	Min.	Typ.	Max.	Unit	Notes
Die Width	1140	1150	1160	μm	
Die Length	1140	1150	1160	μm	
Detection Window	——	1000	——	μm	
Thickness	190	200	210	μm	
Bonding Pad Diameter	——	150	——	μm	For p-pad

Absolute Maximum Rating:

Parameter	Rating
Electrostatic Discharge (HBM)	＞1200V
Reverse Current	-10mA
Forward Current	10mA
Reverse Voltage	-20V
Operating Temperature	-40 to 85 ℃
Storage Temperature	-40 to 125 ℃

Attention:

Handle with care, InP is a brittle material. The device can be permanently damaged when exposed to ESD. Specifications are subject to change without notice.