MITSUBISHI PHOTO DIODES

PD7XX7 SERIES

InGaAs PIN PHOTO DIODES

PD7087, PD708C7, PD7937, PD793D7

DESCRIPTION

PD7XX7 Series are InGaAs pin photodiodes which has a sensitive area of f40mm.
PD7XX7 is suitable for receving the light having a wavelength band of 1000 to 1600nm.
This photodiode features high-speed response and a high quantum efficiency, and is suitable for the light receiving elements for optical fiber communication systems.

Feature

- **f40mm active diameter**
- **1000~1600nm wavelength band**
- **Small dark current**
- **High speed response**
- **High quantum efficiency**
- **Ball lens cap(PD708C7)**

APPLICATION

Receiver for optical communication system

ABSOLUTE MAXIMUM RATINGS

Symbol	Parameter	Conditions	Ratings	Unit
Vr	Reverse voltage	-	20	V
Ir	Reverse current	-	500	mA
If	Forward curent	-	2	mA
Tc	Case temperature	-	-40 ~ +85	°C
Tstg	Storage temperature	-	-40 ~ +100	°C

ELECTRICAL / OPTICAL CHARACTERISTICS (Tc=25°C)

Symbol	Parameter	Test conditions	Limits			Unit
			Min.	Typ.	Max.	
Ct	Capacitance	Vr=5V, f=1MHz	-	0.8 *1	-	pF
Id	Dark current	Vr=5V	-	0.05	1	nA
R	Responsivity	Vr=5V, l=1300nm	0.7	0.90 *2	-	A/W
fc	Cut-off frequency	Vr=5V, l=1300nm, RL=50W, -3dB	-	2.5	-	GHz

***1 Applied to PD7937: Ct=0.6pF(typ.), PD793D7: Ct=0.5pF(typ.)**

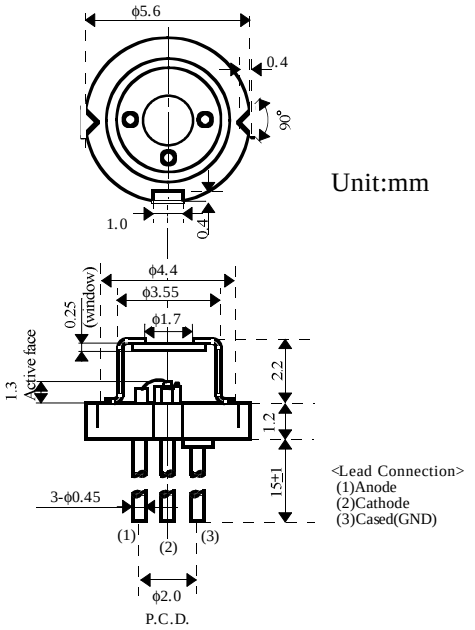
***1 0.85A/W typical fiber coupling sensitivity with GI 50/125 for PD708C7**

PD7XX7 SERIES

OUTLINE DRAWINGS

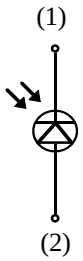
PD7087

- CD header
- Flat glass cap
- 3 pin



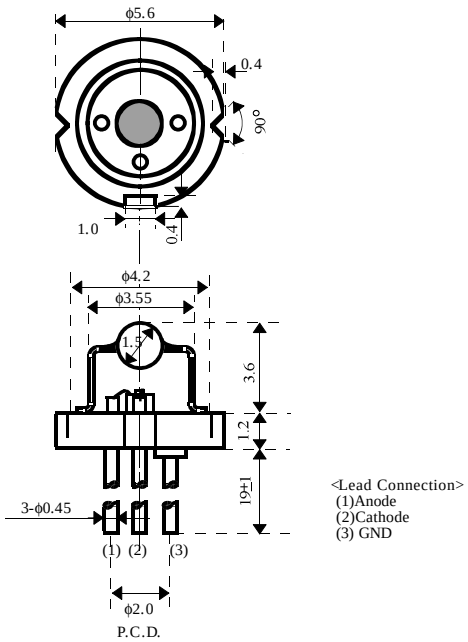
Unit:mm

<Lead Connection>
(1)Anode
(2)Cathode
(3)Cased(GND)

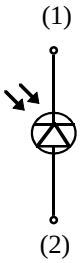


PD708C7

- CD header
- Ball lens
- 3 pin

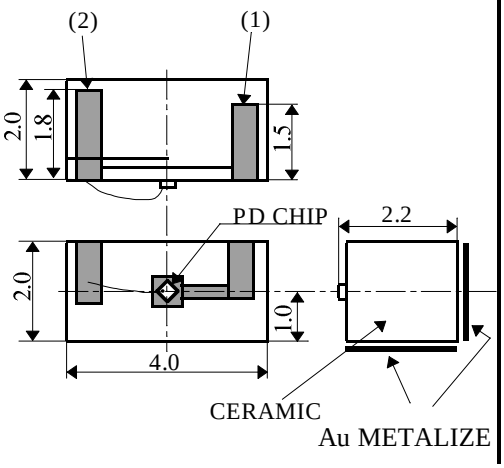


<Lead Connection>
(1)Anode
(2)Cathode
(3) GND



PD7937

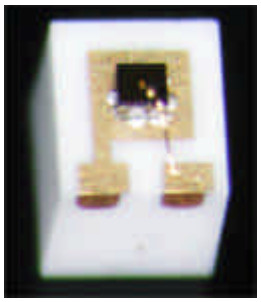
- Alumina submount



PD7XX7 SEIRES

OUTLINE DRAWINGS

PD793D7



Alumina submount