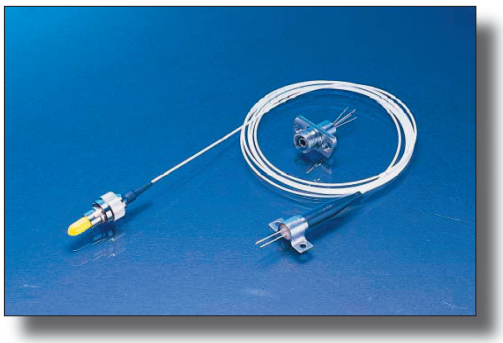
75um Analog InGaAs PIN Photodiode Modules-Pigtailed

R-11-075AX-P-SXX/XXX-X-XX



Features
- InGaAs/InP PIN Photodiode
- High responsivity at 1310nm and 1550nm
- Low dark current
- Low intermodulation distortion
- High responsivity
- Hermetically sealed 3-pin metal case

Packaging
- SM fiber pigtailed with optional FC/ST/SC connector

Applications
- Return path Analog CATV optical receivers to 550MHz
- RoHS Compliant available

Absolute Maximum Ratings (Tc=25°C)

Parameter	Symbol	Rating	Unit
Supply Reverse voltage	V_R	20	V
Forward Current	I_F	2	mA
Reverse Current	I_R	1	mA
Operating Temperature	T_{opr}	-40 ~ 85	°C
Storage Temperature	T_{stg}	-40 ~ 100	°C

(All optical data refer to a coupled 9/125μm SM fiber)

Optical and Electrical Characteristics (Tc=25°C)

Parameter	Symbol	Min	Typ	Max	Unit	Test Conditions
Operating Voltage	V_{op}	-	-	15	V	-
Detection Range		1100	1310	1650	nm	-
Responsivity	R	0.8 0.9	0.85 0.95	- -	A/W	V_R =5V, λ=1310nm V_R =5V, λ=1550nm
Distortion Product : Composite Second Order Composite Triple Beat	 CSO CTB	 - -	 ≦ -70 ≦ -80	 - -	dBc	Note 2
Dark Current	I_{dark}	-	-	0.8	nA	V_R =5V
Capacitance	C	-	0.4	0.5	pF	V_R =5V
Rise/Fall Time	t_r/t_f	-	-	0.5	ns	V_R =5V, 10%~90%
Bandwidth	BW	2	-	-	GHz	V_R =5V
Optical Return Loss	ORL	40	-	-	dB	λ=1310nm

Note: 1.Specifications subject to change without notice.
2.Test condition: 2 lasers at 1550nm with 40% OMI per channel. Total optical power is 0dBm. Distortion products measured at 80MHz, 450MHz, 600MHz, 850MHz, and 1000MHz.

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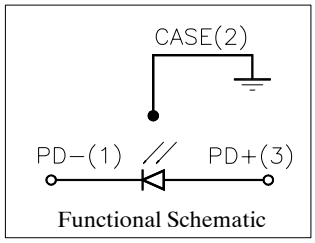
9F, No 81, Shui Lee Rd. • Hsinchu, Taiwan, R.O.C. • tel: 886.3.5169222 • fax: 886.3.5169213
LUMNDS541-JUL2506
rev. A.2

PD Pin Assignment



Functional Schematic

Pin Assignment

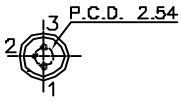
1~PD(−)

2~CASE

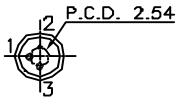
3~PD(+)

Packaging Dimension Units in mm.

Pin-out: A Type



Pin-out: B Type

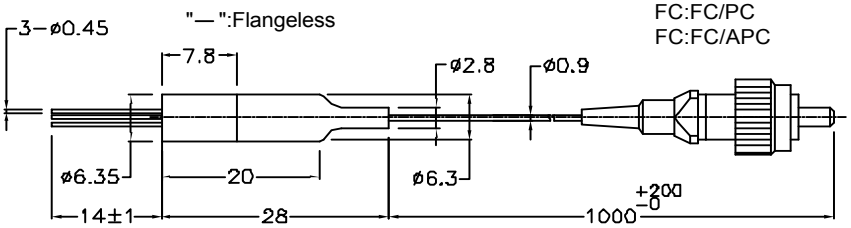


Flange Type

Connector Type

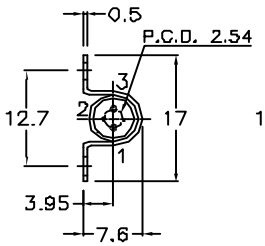
"—":Flangeless

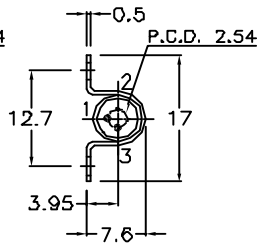
FC:FC/PC
FC:FC/APC

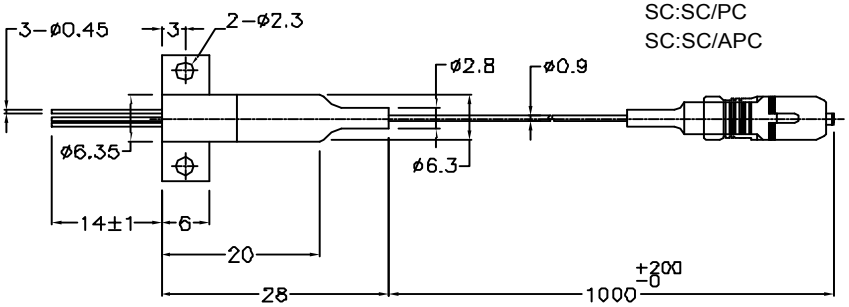


"O":Horizonal (Omega Housing)

SC:SC/PC
SC:SC/APC

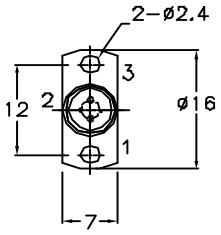


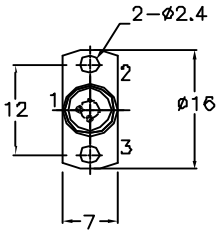


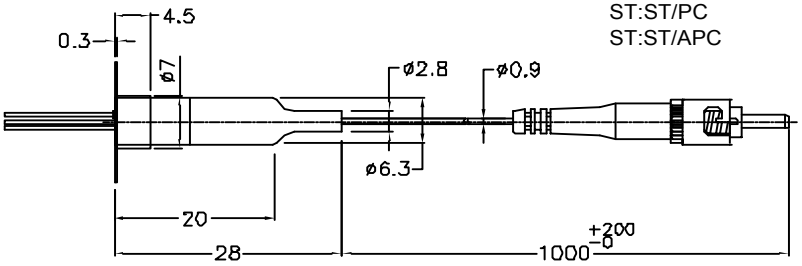


"V":Vertical

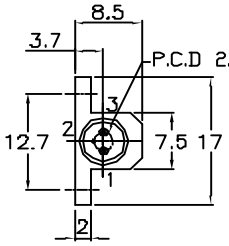
ST:ST/PC
ST:ST/APC

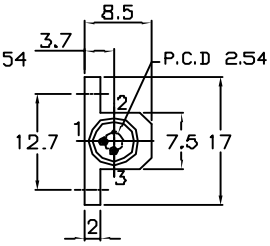


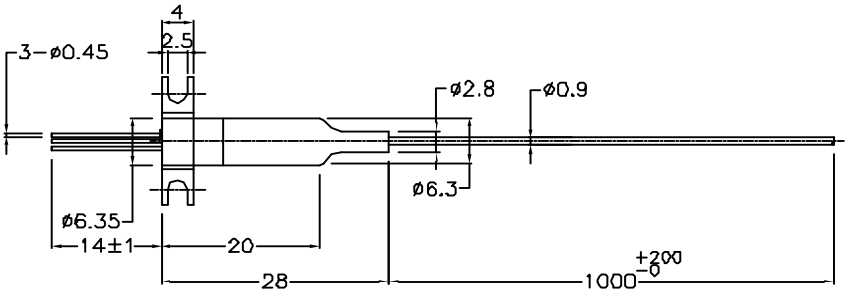




"K":Horizontal (KX Housing)







Ordering Information

R-11-075AX-P-SXX/XXX-X-XX

- Analog
- Pin Aaaignment
  "-" : A Type
  "B" : B Type
- Package
  P=Pigtail
- Fiber Application
  S= 9/125μm
- Connector
  FC/ST/SC/-
- " - " = PC Fiber
  APC = APC Fiber
- Flange type (-;O;V;K)
- RoHS Compliant
  -/G5/GR
  Blank = RoHS non-compliant product
  G5 = RoHS 5/6-compliant product (lead exemption)
  GR = Full RoHS compliant product (no exemption)

Warnings

Handling Precautions: This device is susceptible to damage as a result of electrostatic discharge (ESD). A static free environment is highly recommended. Follow guidelines according to proper ESD procedures.
Laser Safety: Radiation emitted by laser devices can be dangerous to human eyes. Avoid eye exposure to direct or indirect radiation.

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