



# Fiber Coupled 2 µm InGaAs PIN Photodiode

(900 to 2400nm)

### **Product Description**

The Fiber Coupled InGaAs PIN Photodiode is based on a unique package that features high speed fast rise and fall response. The component integrates a fiber with a high sensitivity/small area photodiode for signal detection. The response is analog without TIAC. Our design minimizes component assembly costs and module footprint while increasing stability over a wide temperature and wavelength ranges.

Associated sensor electronic amplifier is also available.



### **Performance Specifications**

Parameters	Min	Typical	Max	Unit	
Wavelength	900		2400	nm	
Responsivity <sup>2</sup>	8	25	45	mA/W	
Input Power	-45		27	dBm	
PDL <sup>3</sup>		0.03	0.05	dB	
Polarization extinction ratio <sup>4</sup>	18	23		dB	
Dark Current at 23°C		0.4	1.0	nA	
Capacitance		0.2	0.9	pF	
Reverse Voltage		5	20	٧	
Rise/Fall Time		10		ns	
Operating Temperature	-5		75	°C	
Storage Temperature	-40		85	°C	
Reliability	Telcordia 1209 and 1221				
Package Dimension	Ø 6.0 x L 18 mm				

#### Notes:

- 1. Insertion Loss excluding connectors.
- 2. The net responsivity is defined as the ratio of the PD current output and optical power measured at output fiber
- 3. Single Mode Fiber version only.
- 4. PM Fiber version only.

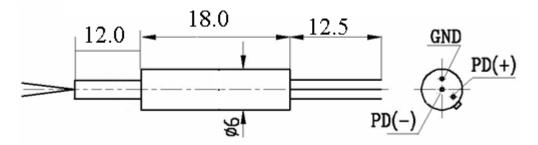
### **Features**

- · Low Cost
- · Large Bandwidth
- ns Fast ResponseHigh Reliability

- Applications
- · Channel Monitoring
- Power Monitoring in Optical Interface Modules
- · Gain Monitoring for Amplifier
- Instruments



## Mechanical Footprint Dimensions (Unit:mm)



Standard Package for Infrared Band. For other wavelength band, size may vary due to special detector configurations.

\*Product dimensions may change without notice. This is sometimes required for non-standard specifications.

### **Ordering Information**

FCHI-	24	2	1	1				
	Wavelength	AR Coating	TEC Cooling	Package	Fiber Type	Fiber Buffer	Fiber Length	Connector
	900-2400 = 24 Special = 0	Yes = 2	No = 1 Yes = 2	Standard=1 Special = 0	SM28=1 SM1900=2 PM1500=3 PM1900=4 50/125=5 Special=0	900umTube=3 Bare fiber =1 Special = 0	0.25m= 1 0.5m = 2 1.0 m= 3 1.5 m= 5 Special =0	None = 1 FC/PC = 2 FC/APC = 3 SC/PC = 4 SC/APC = 5 ST/PC = 6 LC = 7 Special = 0