



## FCPD-55-FC

- InGaAs PIN Photodiode
- Ø 80 µm active area
- >3 GHz Bandwidth
- 0.85 – 1.7 µm spectral range
- FC Receptacle package



### Description

**FCPD-55-FC** is an InGaAs PIN photodiode with an active area of Ø 55 µm in a receptacle package with FC/PC connector. It features a wide range of sensitivity from 850 nm to 1700 nm, >3 GHz bandwidth, high responsivity, low terminal capacitance, and low dark current. **FCPD-80-FC** is optionally available with different connectors and fiber pigtailed package.

### Maximum Ratings\*

Parameter	Symbol	Values		Unit
		Min.	Max.	
Reverse Voltage	$U_R$		15	V
Forward Current	$I_F$		2.0	mA
Operating Temperature	$T_{OPR}$	- 40	+ 85	°C
Storage Temperature	$T_{STG}$	- 50	+ 100	°C
Soldering Temperature ( $t_{MAX} = 5s$ )	$T_{SOL}$		+ 260	°C

\* operating close to or outside these conditions may damage the device

### Electro-Optical Characteristics ( $T_{CASE} = 23°C$ )

Parameter	Symbol	Condition	min.	typ.	max.	Unit
Spectral Range	$\lambda$		850	1310	1700	nm
Aperture Diameter	$\varnothing$			55		µm
Dark Current	$I_D$	$U_R=5 V$		0.2	0.5	nA
Capacitance	$C$	$U_R=5 V$		0.5	1.0	pF
Responsivity	$S$	1301 nm	0.80	0.85		A/W
		1550 nm	0.85	0.90		
Rise / Fall Time	$t_R / t_F$	$U_R=5 V$			0.3	ns
Saturation Power	$P_S$	$U_R=5 V$		1		mW
Bandwidth	$\Delta f$	-3 dB	3.0			GHz
Reverse Breakdown Voltage	$U_{BR}$	$I_R=10 \mu A$	45			V
Fiber Connector					FC *	

\* optional: SC or ST



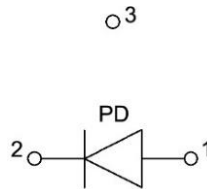


## Electrical Connection

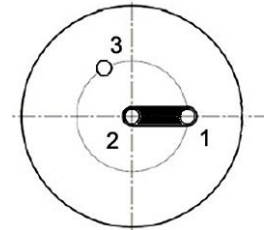
### Pin Configuration\*

Pin #	Function
Pin 1	PD Anode
Pin 2	PD Cathode
Pin 3	Case

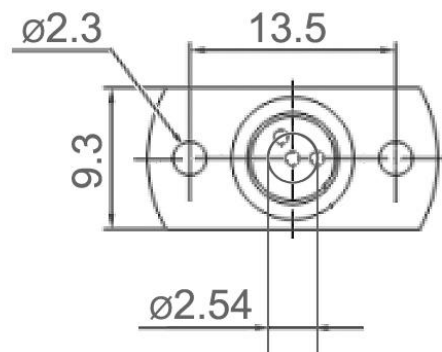
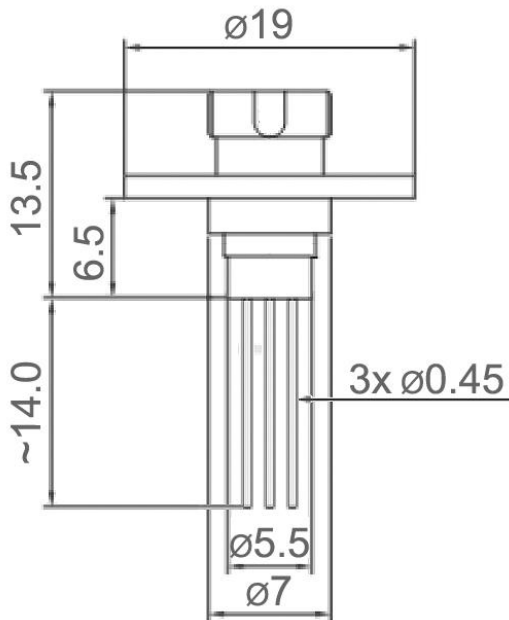
\* subject to change



### Bottom View



## Outline Dimensions



All dimensions in mm

© All Rights Reserved

The above specifications are for reference purpose only and subjected to change without prior notice