



FCPD-55-C9

- InGaAs PIN Photodiode
- Ø 55 µm active area
- >3 GHz Bandwidth
- 0.85 – 1.7 µm spectral range
- 9 µm single mode fiber
- FC/PC Connector



Description

FCPD-55-C9 is an InGaAs PIN photodiode with an active area of Ø 55 µm in a pigtailed coaxial package with 9 µm single mode fiber and 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-55-C9 is optionally available with different connectors and receptacle package without fiber.

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	λ		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	Δf	-3 dB	3.0			GHz
Reverse Breakdown Voltage	U_{BR}	$I_R=10 \mu A$	45			V
Fiber Specification	Fiber Core			9		µm
	Fiber Length			80		cm
	Fiber Connector			FC/PC*		

* FC/APC, SC/APC, LC/APC, or SMA905 optionally available

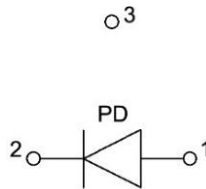


Electrical Connection

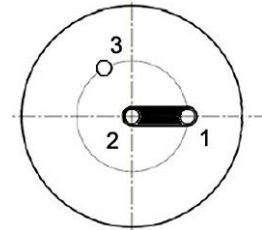
Pin Configuration*

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

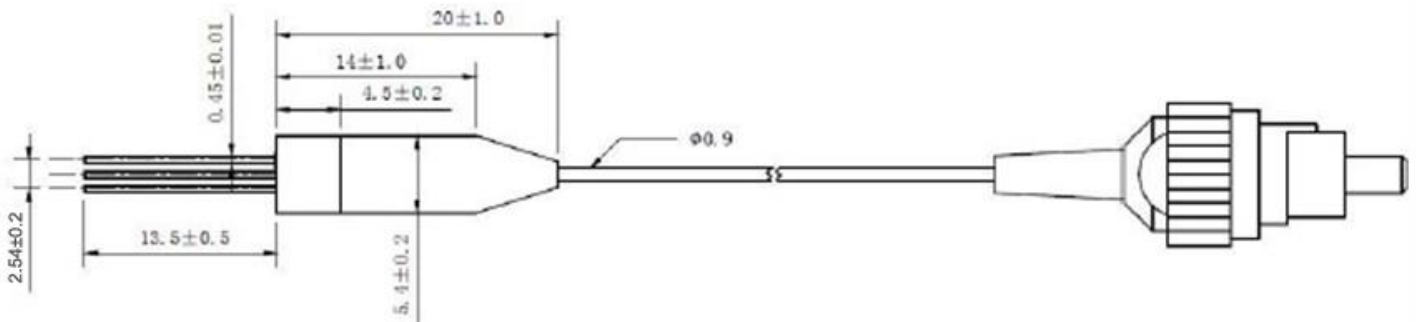
* subject to change



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