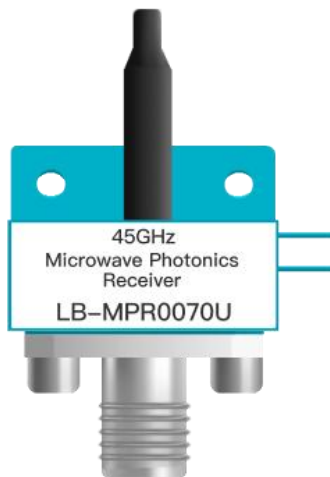


LB-MPR0070U Photodetector



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LINIOBATE
Power Next Gen Photon

Overview

LB-MPR0070U is a high-bandwidth photodetector based on UTC-PD technology, designed for efficient optical-to-electrical conversion. It features a built-in bias-T, offering a 3 dB bandwidth of ≥ 67 GHz under an input optical power of 50 mW, with a responsivity of ≥ 0.4 A/W. This product is well-suited for applications in microwave photonics and related technical fields.

Features

- Ultra-high bandwidth
- High optical responsivity
- Low dark current
- High reliability

Product Specifications

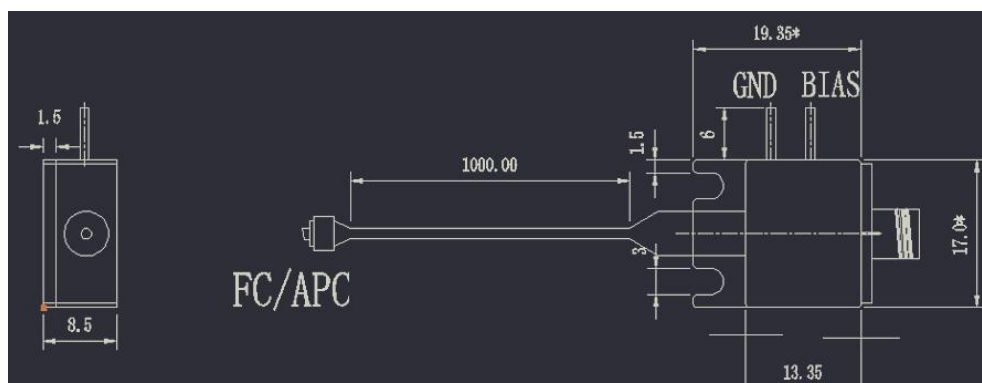
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Operating Bandwidth	λ		1100	1550	1620	nm
Responsivity	R	$\lambda=1550$ nm		0.4		A/W
		$\lambda=1310$ nm		0.4		
Dark Current	I_d	$V_r = +6$ V		20		nA
3 dB bandwidth	BW	$P_{opt}=17$ dBm, $V_r = +6$ V		67		GHz
Saturated optical power	P_{sat}			20		dBm

Note: Unless otherwise specified, all measurements are taken at 25 °C.

Maximum Absolute Ratings

Item	Symbol	Typical	Unit
Optical Power	P_s	23	dBm
Forward Bias Voltage	V_r	10	V
Operating Temperature	T_{op}	-40 ~ +70	°C
Storage Temperature	T_{stg}	-55 ~ +85	°C

Dimension (unit mm)



Handling Precautions

- Appropriate ESD protection measures should be taken to avoid electrostatic damage.
- Do not pull the pigtail directly to prevent device damage.
- Keep the optical connector clean to avoid dust or contamination that may affect performance.

Standards Compliance

GJB 8120-2013 “General Specification for Semiconductor Optoelectronic Modules”

Ordering info

LB	MPR	Note	-70U
Liniobate	Microwave Photonics Receiver	1.85 mm connector	3 dB Bandwidth 70 indicates 70 GHz U indicates UTC-PD