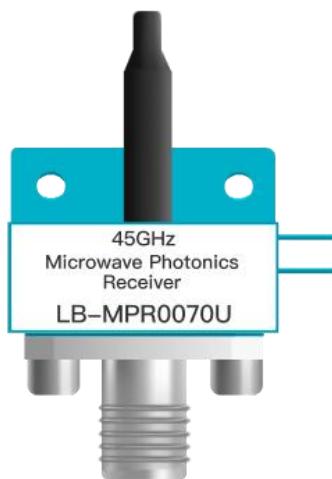




# LB-MPR0070U Photodetector



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## 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  $\geq 67$  GHz under an input optical power of 50 mW, with a responsivity of  $\geq 0.4$  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

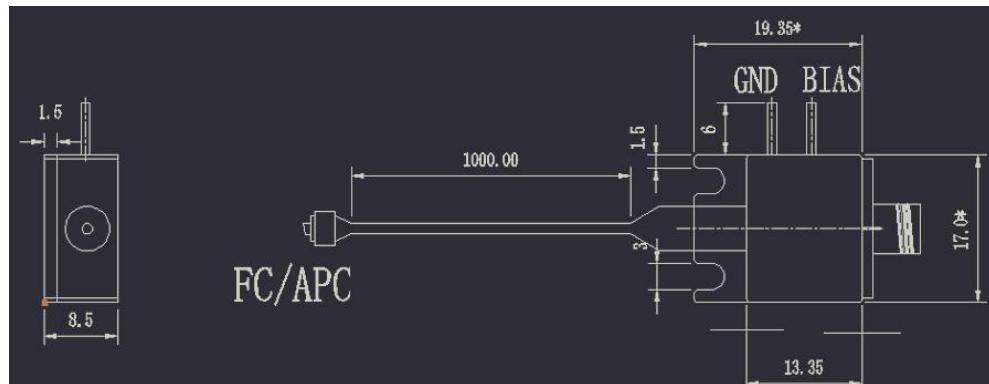
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Operating Bandwidth	$\lambda$		1100	1550	1620	nm
Responsivity	R	$\lambda=1550$ nm		0.4		A/W
		$\lambda=1310$ nm		0.4		
Dark Current	$I_d$	$V_r = +6$ V	20			nA
3 dB bandwidth	BW	$P_{opt}=17$ dBm, $V_r = +6$ V	67			GHz
Saturated optical power	$P_{sat}$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



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## 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



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