## **Featured Products**

Electronics for the Future



Ultra-compact and short-range detection ideal for wearables

# Ultra-Compact Optical Proximity Sensor (Photoreflector)

RPR-0720





RPR-0720 is an ultra-compact optical proximity sensor that adopts an in-house IR VCSEL which is more power-efficient than LEDs and features excellent directivity as the light emitting element and a digital output optical sensor IC for the light receiving element. This makes it ideal for wearables and other small electronic devices requiring attachment/detachment detection.

#### Features

- Optimized for detecting device attachment/detachment (e.g. wearables)
  - Compact package: 2.0×1.0×0.55mm
  - Detection range: 0 to 15mm
- Allows direct connection to Li-ion batteries for driving VCSEL

Eliminates the need for a voltage booster circuit, contributing to greater space and energy savings in a variety of applications





#### A photoreflector detects the presence of an object using a built-in light emitter and receiver.







### Enables Direct Connection to Li-ion Batteries for Driving VCSEL RPR-0720







## RPR-0720-EVK





For more information, visit ROHM's website



<u>RPR-0720 - Datasheet and Product Details | ROHM</u> Semiconductor

Software, USB drivers, User's Guide, and other information necessary for evaluation are available

#### **Enables immediate evaluation of RPR-0720**

Part No.	Operating Voltage [V]	Light Source Voltage [V]	Current Consumption [µA]	Sensor Type	Detection Range (mm)	Interface	Operating Temp. Range (°C)	Package Size [mm]
New RPR-0720	1.7 to 3.6	2.7 to 4.5	up to 35	Proximity	0 to 15	l²C (12bit)	-30 to +85	2.0×1.0×0.55
RPR-0521RS	2.5 to 3.6	2.8 to 5.5	10 to 300	Ambient light, Proximity	5 to 100	l²C (12bit)	-25 to +85	3.94×2.36×1.35

Click on the 🌐 icon to access the product page and the 📒 icon to view the datasheet on ROHM's website.

- The information contained in this document is intended to introduce ROHM Group (hereafter referred to as ROHM) products. When using ROHM products, please verify the latest specifications or datasheets before use.
- ROHM does not warrant that the information contained herein is error-free. ROHM shall not be in any way responsible or liable for any damages, expenses, or losses incurred by you or third parties resulting from errors contained in this document.
- The information and data described in this document, including typical application circuits, are examples only and are not intended to guarantee to be free from infringement of third parties intellectual property or other rights. ROHM does not grant any license, express or implied, to implement, use, or exploit any intellectual property or other rights owned or controlled by ROHM or any third parties with respect to the information and data contained herein.
- When exporting ROHM products or technologies described in this document to other countries, you must abide by the procedures and provisions stipulated in all applicable export laws and regulations, such as the Foreign Exchange and Foreign Trade Act and the US Export Administration Regulations, and follow the necessary procedures in accordance with these provisions.
- No part of this document may be reprinted or reproduced in any form by any means without the prior written consent of ROHM.
- The information contained in this document is current as of July 2023 and is subject to change without notice.



**ROHM Co., Ltd.** 21 Saiin Mizosaki-cho, Ukyo-ku, Kyoto 615-8585 Japan

www.rohm.com