

# Ultra-compact Surface Mount Remote Control Photoreceiver Module

## RPMS1381-H19

**●Outline**

ROHM's RPMS1381-H19 photoreceiver, utilizing original miniaturization technology, features the smallest\* mounting area in the world. In addition, the S/N ratio in broad daylight is significantly improved due to ROHM's unique optical technology.

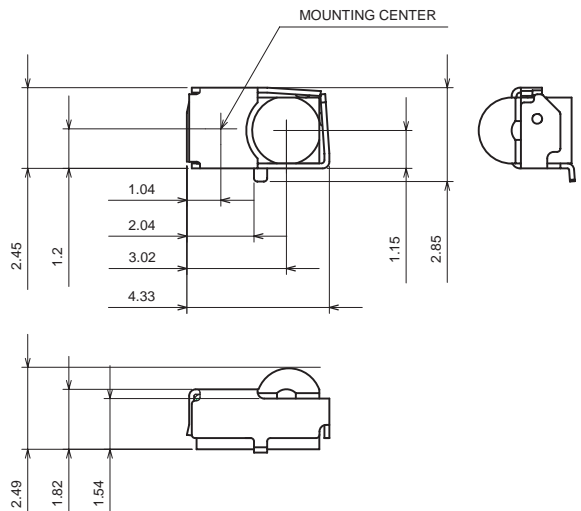
**●Applications**

All types of portable devices, including digital still and video cameras, car navigation equipment, laptops, and gaming consoles

**●Features**

- 1) Smallest mounting area in the world (9mm<sup>2</sup>)
- 2) Resistant to sunlight noise
- 3) Low power consumption: 300μA (in standby mode)

**●Dimensions (Unit : mm)**



**●Absolute maximum ratings (Ta = 25°C)**

Parameter	Symbol	Limits	Unit	Conditions
Supply Voltage	Vcc	6.3	V	
Output Current	Io	2.0	mA	
Storage temperature	Tstg	-40 to +100	°C	
Operating temperature	Topr	-40 to +85	°C	No condensation

\* Jan.07 ROHM study

## Photo Link Module

## ●Electrical, Optical characteristics (Ta = 25°C)

Recommended operating conditions

Parameter	Symbol	Min.	Typ.	Max.	Unit
Supply voltage	Vcc	2.7	3.0	3.6	V

## Characteristics

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Consumption Current	Icc	–	300	500	μA	No outside light, No signal input
Effective Distance	L	5	8	–	m	*1 Outer light condition Ee<10 (lx)
High Level Output Voltage	V <sub>H</sub>	2.5	–	–	V	*1
Low Level Output Voltage	V <sub>L</sub>	–	–	0.5	V	*1 I sink 200μA
ON Pulse Width	T <sub>ON</sub>	400	600	800	μs	*1 Outer light condition Ee<10 (lx)
OFF Pulse Width	T <sub>OFF</sub>	400	600	800	μs	*1 Outer light condition Ee<10 (lx)
Center frequency	f <sub>o</sub>	–	37.9	–	kHz	
Horizontal half angle	θ <sub>1/2</sub>	–	34	–	deg	*2
Vertical half angle	θ <sub>1/2</sub>	–	32	–	deg	*2

\*1 600/600μs burst wave is transmitted by standard transmitter.

However, it must be measured after the initial transmission pulse is 10 pulse.

\*2 It is an angle when the linear arrival distance become half.

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