Ultra-compact Surface Mount Remote Control Photoreceiver Module RPMS2381-H19

●Outline

ROHM's RPMS2381-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.

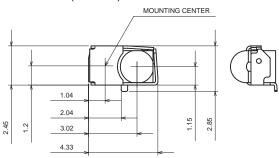
Applications

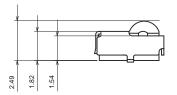
All types of portable devices, including digital still and video cameras, car navigation equipment, laptops, and gaming consoles

● Features

- 1) Smallest mounting area in the world (9mm²)
- 2) Resistant to sunlight noise
- 3) Low power consumption: 950µA (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	lo	2.0	mA	
Storage temperature	Tstg	-40 to +100	°C	
Operating temperature	Topr	-40 to +85	°C	No condensation

* Jan.07 ROHM study

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

Recommended operating conditions

Parameter	Symbol	Min.	Тур.	Max.	Unit
Supply voltage	Vcc	4.5	5.0	5.5	V

Characteristics

Characteristics						
Parameter	Symbol	Min.	Тур.	Max.	Unit	Conditions
Consumption Current	lcc	_	0.95	1.5	mA	No outside light, No signal input
Effective Distance	L	5	8	-	m	*1 Outer light condition Ee<10 (Ix)
High Level Output Voltage	Vн	4.5	_	-	V	*1
Low Level Output Voltage	VL	-	-	0.5	V	*1 I sink 200μA
ON Pulse Width	Ton	400	600	800	μs	*1 Outer light condition Ee<10 (Ix)
OFF Pulse Width	Toff	400	600	800	μs	*1 Outer light condition Ee<10 (Ix)
Center frequency	fo	-	37.9	-	kHz	
Horizontal half angle	θ1/2	-	34	-	deg	*2
Vertical half angle	θ1/2	-	32	-	deg	*2

 $[\]ast 1~600/600 \mu s$ burst wave is transmitted by standard transmitter.

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

st2 It is an angle when the linear arrival distance become half.

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Appendix1-Rev2.0