Ultra-compact Surface Mount Remote Control Photoreceiver Module RPMS1371-H19

Outline

ROHM's RPMS1371-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

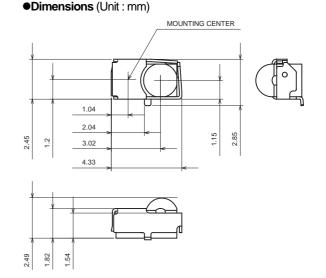
Features

- 1) Smallest mounting area in the world (9mm²)
- 2) Resistant to sunlight noise
- 3) Low power consumption: 300µA (in standby mode)



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



RPMS1371-H19 series

Photo Link Module

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

Recommended operating conditions								
Parameter	Symbol	Min.	Тур.	Max.	Unit			
Supply voltage	Vcc	2.7	3.0	3.6	V			

Characteristics

Parameter	Symbol	Min.	Тур.	Max.	Unit	Conditions
Consumption Current	lcc	-	300	500	μA	No outside light, No signal input
Effective Distance	L	5	8	-	m	*1 Outer light condition Ee<10 (Ix)
High Level Output Voltage	Vн	2.5	-	-	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	-	36.7	-	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.

 $\ast 2~$ It is an angle when the linear arrival distance become half.

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Appendix1-Rev2.0

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