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# Ultra-compact, Ultra-thin Top View FIR-compatible IrDA Module with Built-in Remote Control Transmission Function

# RPM973-H16

#### Outline

The RPM973-H16 is a high performance IrDA module that integrates an infrared remote control transmission function and a high-speed (4Mbps) FIR-compatible IrDA module into the world's smallest\* package, resulting in substantial space savings.

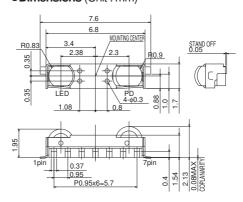
## Applications

All types of data communication, including, image data and music transmission data in mobile phones, digital still cameras, and printers

#### Features

- 1) Equipped with a remote control function
- 2) Smallest package (7.6x1.7x2.13mm)
- 3) 4Mbps FIR-compatible (faster speeds possible with Ir Simple)

# ●Dimensions (Unit : mm)



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

Parameter	Symbol	Limits	Unit
Supply voltage	Vcc / VLEDA / VIO	6.5 *1	V
Input voltage	Vin(3,4,5pin)	-0.3 to VIO+0.3	V
Operation temperature	Topr	-25 to +85	°C
Storage temperature	Tstg	-40 to +100	°C

<sup>\*1)</sup> This applies to all pins basis ground pin (7pin).

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

Recommended operating conditions

Parameter	Symbol	Min.	Тур.	Max.	Unit
Supply voltage	Vcc	2.4	3.0 3.6		V
	VLEDA	2.7	3.0	5.5	٧
	VIO	1.7	3.0	Vcc	V

## Electrical Optical Characteristics(Unless otherwise noted, Vcc=3V, VLEDVCC=3V, VIO=3V, Ta=25°C)

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Parameter	Symbol	Min.	Тур.	Max.	Unit	Conditions
Consumption Current1(SIR/MIR Mode)	lcc1	400	800	1600	μΑ	PWDOWN=0V, At no input light
Consumption Current2(FIR Mode)	lcc2	400	1000	1600	μΑ	PWDOWN=0V, At no input light
Consumption Current3(at PWDOWN)	lcc3	_	0.01	0.2	μΑ	PWDOWN=VIO, At no input light
LED anode current	ILED	180	250	300	mA	
Receiver latency time	tRT	_	100	200	μs	
Peak wavelength	λP	880		900	nm	
Intensity	ΙE	25	65	_	mW/Sr	–15deg≦θ <sub>L</sub> ≦15deg
Half-angle	θL/2	±15	_	_	deg	
Minimum irradiance in augular1	Eemin1	_	_	8.1	μW/cm²	–15deg≦θ∟≦15deg, ≦115.2kbps
Minimum irradiance in augular2	Eemin2	_	_	20	μW/cm²	–15deg≦θ <sub>L</sub> ≦15deg, >115 <b>.</b> 2kbps
Input half-angle	θD/2	±15	_	_	deg	

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Appendix1-Rev2.0

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