

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.

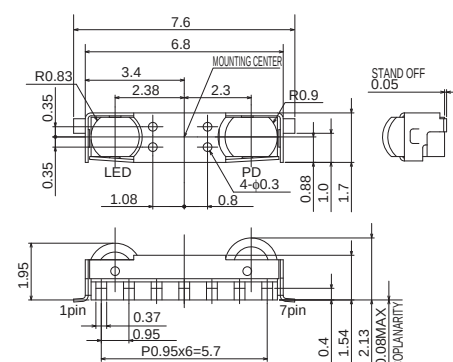
●Applications

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

*1) This applies to all pins basis ground pin (7pin).

Photo Link Module

●Electrical Optical characteristics (Ta = 25°C)

Recommended operating conditions

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

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

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Consumption Current1(SIR/MIR Mode)	Icc1	400	800	1600	μA	PWDOWN=0V, At no input light
Consumption Current2(FIR Mode)	Icc2	400	1000	1600	μA	PWDOWN=0V, At no input light
Consumption Current3(at PWDOWN)	Icc3	—	0.01	0.2	μA	PWDOWN=VIO, At no input light
LED anode current	I _{LED}	180	250	300	mA	
Receiver latency time	t _{RT}	—	100	200	μs	
Peak wavelength	λ _P	880		900	nm	
Intensity	I _E	25	65	—	mW/Sr	−15deg≤θ _L ≤15deg
Half-angle	θ _{L/2}	±15	—	—	deg	
Minimum irradiance in augular1	E _{emin1}	—	—	8.1	μW/cm ²	−15deg≤θ _L ≤15deg, ≤115.2kbps
Minimum irradiance in augular2	E _{emin2}	—	—	20	μW/cm ²	−15deg≤θ _L ≤15deg, >115.2kbps
Input half-angle	θ _{D/2}	±15	—	—	deg	

Notes

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