

Ultra-small package suitable for mobile equipments

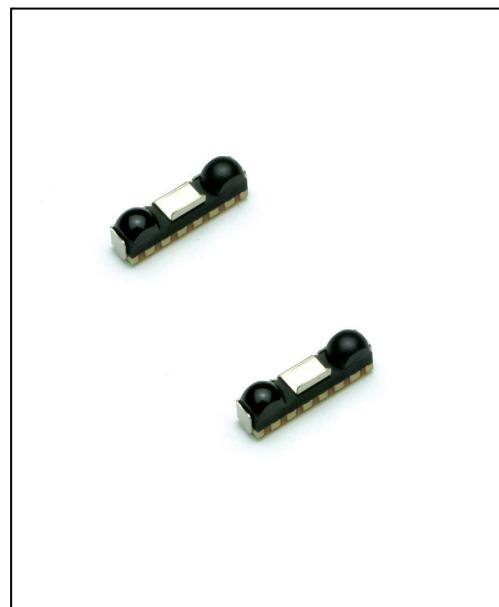
IrDA module for Light-Emitting Remote Control CND0205A

■ Overview

CND0205A is a light-emitting module compliant with the IrDA standard (max. 115.2kbps). Its ultra-small package is well suited for mobile equipment such as mobile phones.

■ Feature

- Compliant with IrDA Ver1.2 (max. 115.2kbps)
- Low power consumption (when shut down)
- Remote control light emitting function
- Reflow soldering
- Ultra-small package: 1.6(H) × 7.2(W) × 2.6(D)mm, side view type



■ Applications

Cellular phones, PDA's

■ Absolute Maximum Ratings

Parameter	Symbol	Rating	Unit
Supply voltage	V_{CC}	- 0.5 to +3.8	V
Operating ambient temperature	T_{opr}	-20 to +70	°C
Storage temperature	T_{stg}	-40 to +85	°C

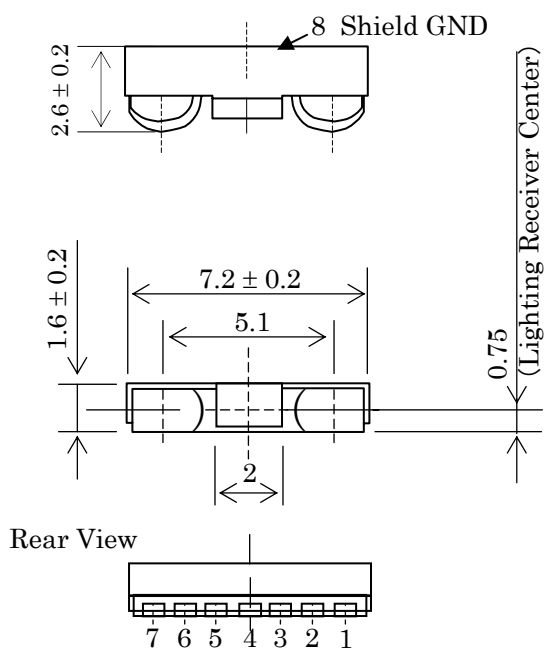
■ Main characteristics ($T_a=25^{\circ}\text{C}$, $V_{CC}=3\text{V}$)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Note
Operating ambient temperature	V_{CC}	2.4	2.8	3.3	V	
Supply current when stand-by	I_{CC}	—	100	120	μA	
Supply current when shut-down	I_{CCsd}	—	10	200	nA	
Data rate		9.6	—	115.2	kbps	
Radiation power (IrDA mode)	I_{CH}	7	12	—	mW/sr	
Radiation power (Remote control mode)	I_{CH}	37	44	—	mW/sr	1
Maximum receiving distance	L_{MAX}	20	—	—	cm	2

Note 1) When a light-sensitive element with sensitivity of $0.05\mu\text{W}/\text{cm}^2$ is used for 880nm LED, transmission distance can be extended to 6m or longer.

Note 2) When using light-sensitive element with radiation power of $3.6\text{mW}/\text{sr}$.

■ Package



■ Pin Descriptions

Pin	Symbol	Pin	Symbol
1	LEDA	5	SD
2	R-TXD	6	Vcc
3	I-TXD	7	GND
4	RXD	8	Shield GND

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