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*Ultra-small package suitable for mobile equipments*

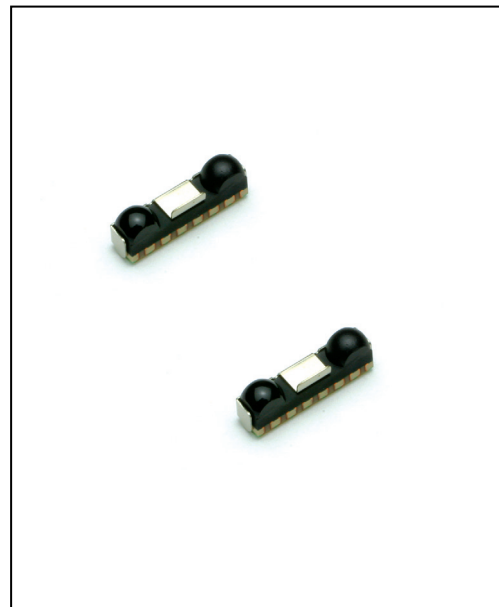
## IrDA module for Light-Emitting Remote Control CND0205A

### ■ 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

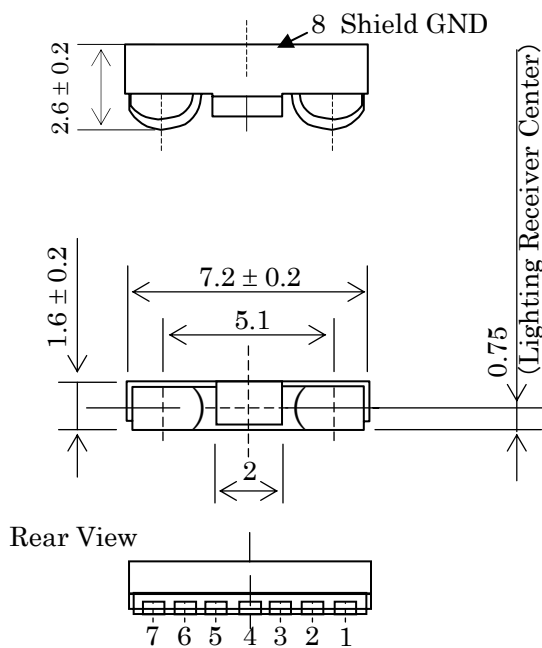
## ■ Main characteristics ( $T_a=25^{\circ}\text{C}$ , $V_{CC}=3\text{V}$ )

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	$\mu\text{A}$	
Supply current when shut-down	$I_{CC}^{sd}$	-	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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