

# **GP2W3270YP0F**

## IrDA Compliant Transceiver Module 9.6 to 115.2 kb/s (SIR LP) Low Profile Low Consumption Current



## ■Agency approvals/Compliance

- Content status of six substances specified in
- "Management Methods for Control of Pollution Cause
- by Electronic Information Products Regulation
- (popular name : *China RoHS*
- (Chinese :

## Description

The **GP2W3270YP0F** is an infrared transceiver module for IrDA ver. 1.4 (SIR LP).

The transceiver consisits of a pin-photo diode, infrared emitter and control IC in a single package.

This device is built in LED constant current circuit

This device have remote control transmission function (built in drive circuit).

## Features

- Compliant with the fillAct of (SIRALP) Infinitiation quest (2.6 to 11522 files Francission distance (20 cm)
   Smith puskage [17.0 c, W22.4c, 10.125 nm)
- Peak emission wavelength: 1890 nm. (Buitsin:shared single: LED for RC and 1803)
- Side view type
  Soldering geblow type
  Shield type
  Low consumption current due to shuddown function
- Operates from 2.4 to 3.6 V
  Operates from 2.4 to 3.6 V
- 0. With remote control function
- (buil in drive circuit)
- With Vio terminal

## Applications

- 1. Mobile equipment
- (Cellular phone, Pager, Smart phone, PDAs, Portable printer, etc. )
- 2. Digital imaging equipmer
- (Digital camera, Photo imaging printer)
- 3. POS equipment

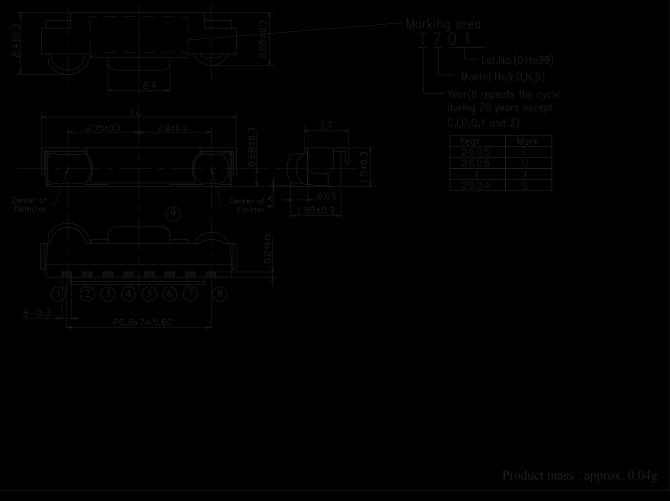
Notice The content of data sheet is subject to change without prior notice.

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## Outline Dimensions

(Unit : mm



**Recommended PCB Foot Pattern** Dimensions are shown for reference

(Unit:mm)

Center of mounting area



## Recommended Size of Solder Creamed Paste (Reference)

(Unit:mm)

Dimensions are shown for reference. Please open the solder mask as below to that the size of solder creamed paste for this device before reflow soldering must be as large as one of the foot pattern land indicated for reference.

: Solder paste area



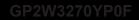
## Absolute Maximum Ratings (Ta=25

\*1 Pulse width: 25 (10), Duty ratio: 3 (14)
 \*2 Pulse width: 17 (16), Duty ratio: 174
 \*3 Suidering reflexy time: 10s

## Electrical Characteristics

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Sheet No.: E3-A01101EN



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## Recommended Operating Conditions

46 Refer to Fig.7



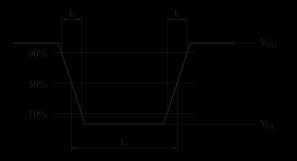
Truth Table

Fig.1 Recommended External Circuit

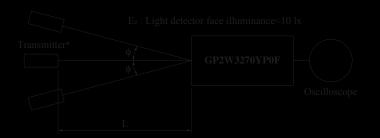
## Fig.2 Input Signal Waveform(Receiver sid

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## Fig.3 Output Waveform Specification(Receiver side)



## Fig.4 Standard Optical System(Receiver side)

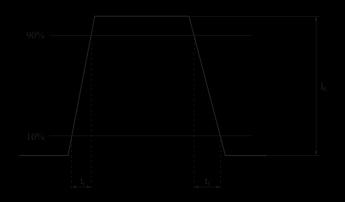


 $\phi$ : Indicates horizontal and vertical directions

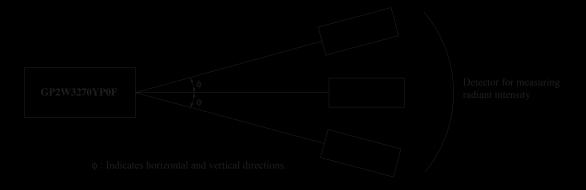
<sup>\*</sup>Transmitter shall use GP2W3270YP0F ( $\lambda_p$ =890nm TYP.) which is adjusted the radiation intensity at 3.6mW/sr.

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## Fig.5 Output Waveform Specification(Transmitter side)



## Fig.6 Standard Optical System(Transmitter side)



## Fig.7 Recommended Circuit of Transmitter side





## Notes

- (1) You (in parents and indexed) barrees of flaterand (barrees), multiple parents (margary) matrix all you' Addition (barrees and barrees and barrees).
- Then, this Then Around Time means the time when this device does not temporarily detect the signal light, since the transmitted light form the transceiver reaction the detector side of the transceiver.
- glass of science avoids backs and a caller of the set (1) 200 besides and the science of the spaces of the science of the
- (4) When these is much external distances [h] there is near the base the transmission of and the detector from near tree much external distances [h]. There is near that the paths office there signal output is examined is near tree much external distances of the base much is a near the by out and structure to reduce distance hight on the sheets.
- (a) then the given is sended with each second converse multiplication manipulated convert to the second (f) (a) with a first point of the second (f) and the second (f) is a first point of the second (f) is a first point of
- yand mod situen and huquo shoit guithes tigif to notsbargebad of (2) and no seasyndha akan , guingi ede turne (2) (casy chuddebargeb X (9: ) andarete energies)

MAX.70s

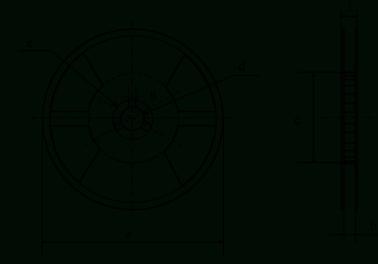


## Package specification

• Tape and Reel package 2000 pcs/reel



### Reel structure and Dimensions



### Direction of product insertion





## Cleaning Instructions

Solvent cleaning

Solvent temperature 45°C or less, Immersion for 3 min or less

Ultrasonic cleaning

- The effect to device by ultrasonic cleaning differs by cleaning bath size, ultrasonic power output cleaning time, if the tree or device mounting condition size.
- Please test it in actual using condition, and confirm that doesn't occur any defect beform
- the ultrasonic cleaning. The cleaning shall be carried out with solvent below.

Recommended Solvent materials :::

Ethyl alcohol, Methyl alcohol, Isopropyl alcohol.

## Presence of ODC etc.

This produce shall not constant the solitowing content of a

Regulation substances :: CFCb; Ealer: Carbon tetrachtoride; E.E.F.Fridiloroeikane (Weihylchlonoform)

Specific browingies flume relationts and as the PHRS and PROS are not used in this protect at all.

The Roll Scheering (2002/95/10

This product complies with the Rot 13 directive (2002/95/142).

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- ---- Personal computers
- --- Office automation equipment
- --- Telecommunication equipment [terminal]
- --- Test and measurement equipment
- --- Industrial control
- --- Audio visual equipment
- --- Consumer electronics

(ii) Measures such as fail-safe function and redundant design should be taken to ensure reliability and safety when SHARP devices are used for or in connection with equipment that requires higher reliability such as:

- --- Transportation control and safety equipment (i.e.,
- --- Traffic signals
- --- Gas leakage sensor breakers
- --- Alarm equipment
- --- Various safety devices, etc.

(iii) SHARP devices shall not be used for or in connection with equipment that requires an extremely high level of reliability and safety such as:

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