GP2W3270XP0F

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

■Description

The **GP2W3270XP0F** 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

1. Compliant with the IrDA 1.4 (SIR LP)
   Transmission speed : 9.6 to 115.2 kb/s
   Transmission distance : 20 cm
2. Small package
   L 8.3 × W 2.1 × H 1.7 mm
3. Peak emission wavelength : 890 nm
   (Buit-in shared single LED for RC and IrDA)
4. Top view type
5. Soldering reflow type
6. Shield type
7. Low consumption current due to shutdown function
   (Consumption current at shutdown mode : Max. 0.1 μA)
8. Operates from 2.4 to 3.6 V
9. With built in LED constant circuit
10. With remote control function
    (buit in drive circuit)
11. With V_{IO} terminal

■Agency approvals/Compliance

1. Compliant with IEC60825-1 class 1 eye safety standard
2. Compliant with RoHS directive (2002/95/EC)
3. **Content status of six substances specified in "Management Methods for Control of Pollution Caused by Electronic Information Products Regulation" (popular name : *China RoHS*) (Chinese : 电子信息产品污染控制管理办法)**
   ; refer to page 13
4. Lead (Pb) free device

■Applications

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

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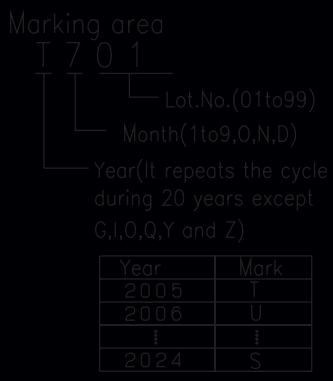
■Outline Dimensions

(Unit : mm)

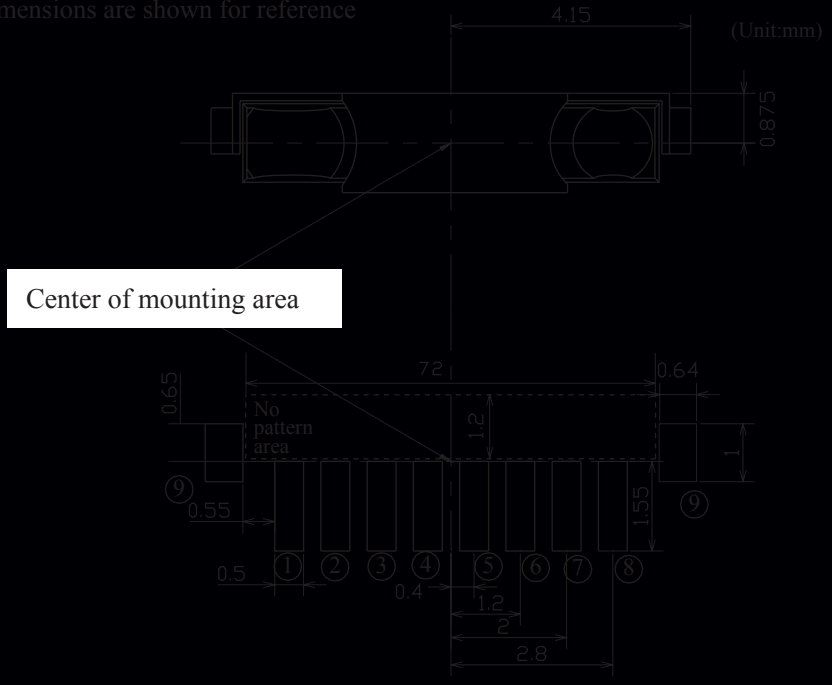


Year	Mark
2005	T
2006	U
⋮	⋮
2024	S

Product mass : approx. 0.04g

■Recommended PCB Foot Pattern

Dimensions are shown for reference



■Recommended Size of Solder Creamed Paste (Reference)

(Unit:mm)

Dimensions are shown for reference.
Please open the solder mask as below so 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°C)

■Electrical Characteristics (If=25mA, Vcc=5V)

■Recommended Operating Conditions

■Truth Table

Fig.1 Recommended External Circuit

Fig.2 Input Signal Waveform(Receiver side)

Fig.3 Output Waveform Specification(Receiver side)

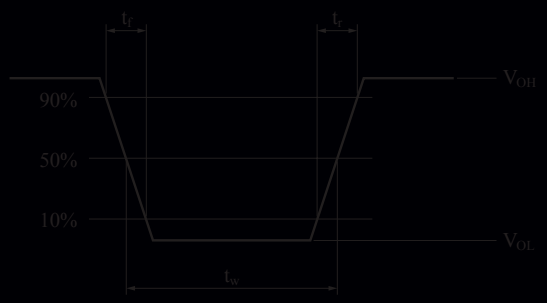
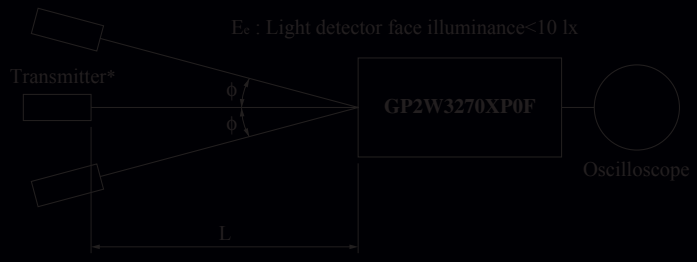


Fig.4 Standard Optical System(Receiver side)



ϕ : Indicates horizontal and vertical directions.

*Transmitter shall use **GP2W3270XP0F** (λp=890nm TYP.) which is adjusted the radiation intensity at 3.6mW/sr.

Fig.5 Output Waveform Specification(Transmitter side)

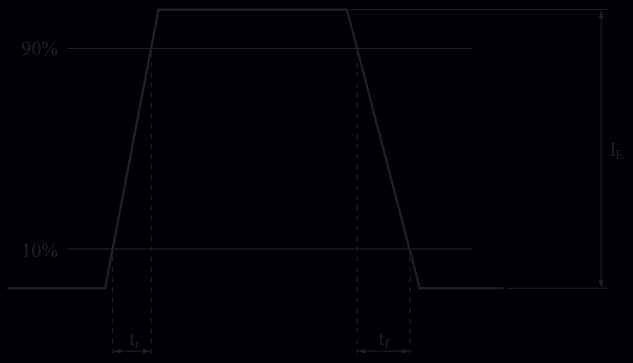
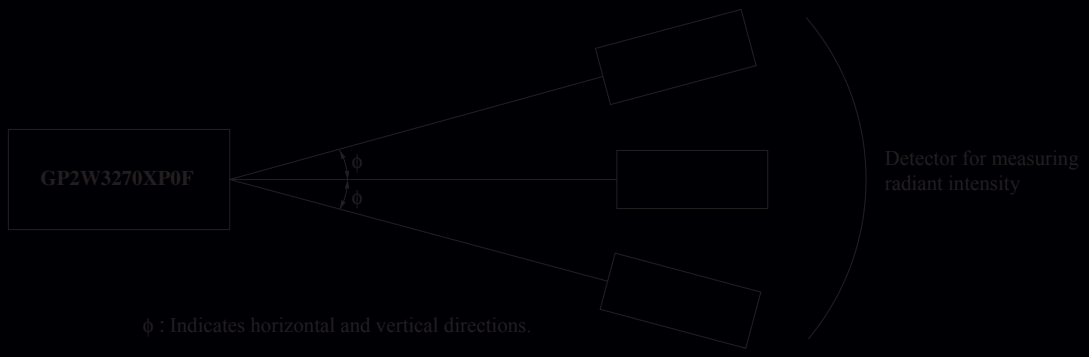
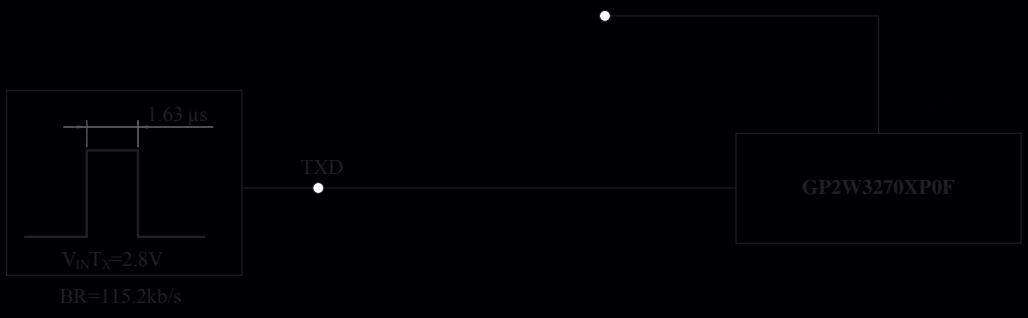


Fig.6 Standard Optical System(Transmitter side)



ϕ : Indicates horizontal and vertical directions.

Fig.7 Recommended Circuit of Transmitter side



■Notes

■ Soldering Method

1 to 5℃/s

1 to 5℃/s

1 to 5℃/s

■Package specification

●Tape and Reel package
2000pcs/reel

●Cleaning Instructions

●Presence of ODC etc.

This product shall not contain the following materials.
And they are not used in the production process for this product.
Regulation substances : CFCs, Halon, Carbon tetrachloride, 1,1,1-trichloroethane (Methylchloroform)

Specific brominated flame retardants such as the PBB and PBDE are not used in this product at all.

* The RoHS directive (2002/95/EC)
This product complies with the RoHS directive (2002/95/EC).
Object substances : lead, cadmium, hexavalent chromium, polybrominated biphenyls (PBB), and polybrominated diphenyl ethers (PBDE).

* Content of six substances specified in "Management Methods for Control of Pollution Caused by Electronic Information Products Regulation" (China)

"○" indicates that the content of the toxic and hazardous substance in all the homogeneous materials for the part is below the concentration limit requirement, as described in SJ/T 11363-2006 Standard.

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--- Office automation equipment
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--- Test and measurement equipment
--- Industrial control
--- Audio visual equipment
--- Consumer electronics
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--- Traffic signals
--- Gas leakage sensor breakers
--- Alarm equipment
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