

## 阅读申明

- 1.本站收集的数据手册和产品资料都来自互联网，版权归原作者所有。如读者和版权方有任何异议请及时告之，我们将妥善解决。
- 2.本站提供的中文数据手册是英文数据手册的中文翻译，其目的是协助用户阅读，该译文无法自动跟随原稿更新，同时也可能存在翻译上的不当。建议读者以英文原稿为参考以便获得更精准的信息。
- 3.本站提供的产品资料，来自厂商的技术支持或者使用者的心得体会等，其内容可能存在描述上的差异，建议读者做出适当判断。
- 4.如需与我们联系，请发邮件到marketing@iczoom.com，主题请标有“数据手册”字样。

## Read Statement

1. The datasheets and other product information on the site are all from network reference or other public materials, and the copyright belongs to the original author and original published source. If readers and copyright owners have any objections, please contact us and we will deal with it in a timely manner.
2. The Chinese datasheets provided on the website is a Chinese translation of the English datasheets. Its purpose is for reader's learning exchange only and do not involve commercial purposes. The translation cannot be automatically updated with the original manuscript, and there may also be improper translations. Readers are advised to use the English manuscript as a reference for more accurate information.
3. All product information provided on the website refer to solutions from manufacturers' technical support or users the contents may have differences in description, and readers are advised to take the original article as the standard.
4. If you have any questions, please contact us at marketing@iczoom.com and mark the subject with "Datasheets" .

## GP2W0112YP

## IrDA Transceiver Module

IrDA Transceiver Module (for IrDA 1.2 Low Power Use Only)

### Feature

- (1) Exclusive for use in IrDA 1.2 Low Power standard
- (2) Low voltage operation type  
(Operating voltage: 1.7 to 2.5 V)
- (3) Compact package with integrated transmitter and receiver  
(7.9 x 2.85 x 2.15h mm)
- (4) 3-state output type
- (5) Separate power supplies for optical receiver(VCC) and transmitter(VLEDA)
- (6) Low dissipation current  
(Dissipation current: TYP. 90μA)
- (7) Dissipation current is low due to a shutdown function  
(Dissipation current at shut-down: TYP:0.001μA)
- (8) Built-in constant-current LED circuit  
(TYP. 32mA)

### Applications

- (1) Cellular phone, PHS
- (2) Personal information tools

### Specifications

Parameter	Symbol	Specifications			Unit	Conditions
		MIN.	TYP.	MAX.		
Maximum communication distance	L	0.2	-	-	m	*1
Operating supply voltage	V <sub>CC</sub>	1.7	-	2.5	V	-
	V <sub>LEDA</sub>	2.0	-	6.0	V	-
Dissipation current	I <sub>CC</sub>	-	90	120	μA	V <sub>CC</sub> =1.8V
Dissipation current at shut-down	I <sub>CC-S</sub>	-	0.001	0.1	μA	V <sub>CC</sub> =1.8V
High level output voltage	V <sub>OH1</sub>	V <sub>CC</sub> -0.4	-	-	V	-
Low level output voltage	V <sub>OL1</sub>	-	-	0.4	V	-
Delay time	-	-	-	0.5	ms	-
Radiant intensity	I <sub>E</sub>	3.6	-	-	mW/sr	V <sub>CC</sub> =1.8V
LED peak current	I <sub>LED</sub>	-	32	-	mA	-
Peak wavelength	λ <sub>P</sub>	850	870	900	nm	-
Operating temperature	T <sub>opr</sub>	-20	-	85	°C	-

\*1 : Using standard transceiver (Light-emission intensity: 3.6mW/sr, Light-detection sensitivity 9μW/cm<sup>2</sup>)

(Notice)

•In the absence of confirmation by device specification sheets, SHARP takes no responsibility for any defects that may occur in equipment using any SHARP devices shown in catalogs, data books, etc. Contact SHARP in order to obtain the latest device specification sheets before using any SHARP device.

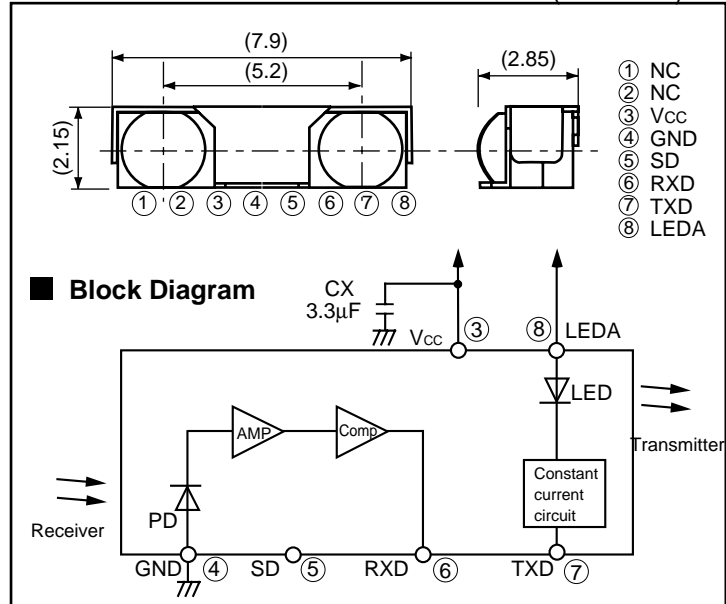
•Specifications are subject to change without notice for improvement.

(Internet)

•Data for Sharp's optoelectronic/power devices is provided on internet. (Address <http://www.sharp.co.jp/ecg/>)

### Outline Dimensions

(Unit : mm)



IrDA 1.2 Low Power:

With this standard, the delay time has been reduced from 10ms to 0.5ms in order to decrease the transmission distance for IrDA 1.0 from 1m to 20cm and to transmit audio signals.

IrDA: Stands for Infrared Data Association. Industrial group name for standardizing infrared communication specifications.

### NOTICE

- The circuit application examples in this publication are provided to explain representative applications of SHARP devices and are not intended to guarantee any circuit design or license any intellectual property rights. SHARP takes no responsibility for any problems related to any intellectual property right of a third party resulting from the use of SHARP's devices.
- Contact SHARP in order to obtain the latest device specification sheets before using any SHARP device. SHARP reserves the right to make changes in the specifications, characteristics, data, materials, structure, and other contents described herein at any time without notice in order to improve design or reliability. Manufacturing locations are also subject to change without notice.
- Observe the following points when using any devices in this publication. SHARP takes no responsibility for damage caused by improper use of the devices which does not meet the conditions and absolute maximum ratings to be used specified in the relevant specification sheet nor meet the following conditions:
  - (i) The devices in this publication are designed for use in general electronic equipment designs such as:
    - 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., aircraft, trains, automobiles, etc.)
    - 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:
    - Space applications
    - Telecommunication equipment [trunk lines]
    - Nuclear power control equipment
    - Medical and other life support equipment (e.g., scuba).
- Contact a SHARP representative in advance when intending to use SHARP devices for any "specific" applications other than those recommended by SHARP or when it is unclear which category mentioned above controls the intended use.
- If the SHARP devices listed in this publication fall within the scope of strategic products described in the Foreign Exchange and Foreign Trade Control Law of Japan, it is necessary to obtain approval to export such SHARP devices.
- This publication is the proprietary product of SHARP and is copyrighted, with all rights reserved. Under the copyright laws, no part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, for any purpose, in whole or in part, without the express written permission of SHARP. Express written permission is also required before any use of this publication may be made by a third party.
- Contact and consult with a SHARP representative if there are any questions about the contents of this publication.