

PD101SC05S Datasheet



<https://www.DiGi-Electronics.com>

DiGi Electronics Part Number	PD101SC05S-DG
Manufacturer	Sharp Microelectronics
Manufacturer Product Number	PD101SC05S
Description	SENSOR PHOTODIODE 820NM SIDE
Detailed Description	Photodiode 820nm Side View

This model PD101SC05S is available at DiGi Electronics.

DiGi Electronics offers a global database of semiconductor and electronic component datasheets.

We welcome your inquiries regarding pricing, lead time, or other product-related questions.

 [Request a Quote](#)

 [Datasheet Search](#)



Tel: +00 852-30501935

RFQ Email: Info@DiGi-Electronics.com

DiGi is a global authorized distributor of electronic components.

Purchase and inquiry

Manufacturer Product Number:

PD101SC055

Series:

-

Wavelength:

820nm

Spectral Range:

-

Responsivity @ nm:

0.55 A/W @ 780nm

Voltage - DC Reverse (Vr) (Max):

5 V

Active Area:

-

Operating Temperature:

-25°C ~ 85°C

Package / Case:

Side View

Manufacturer:

Sharp Microelectronics

Product Status:

Obsolete

Color - Enhanced:

-

Diode Type:

-

Response Time:

-

Current - Dark (Typ):

1nA

Viewing Angle:

-

Mounting Type:

Through Hole

Environmental & Export classification

RoHS Status:

RoHS non-compliant

ECCN:

EAR99

Moisture Sensitivity Level (MSL):

2 (1 Year)

HTSUS:

8541.49.1050

SHARP

Under development	
New product	●

PD101SC0SS**Photodiode**

Photodiode for 12× Speed Writing CD-R/RW power monitor

Features

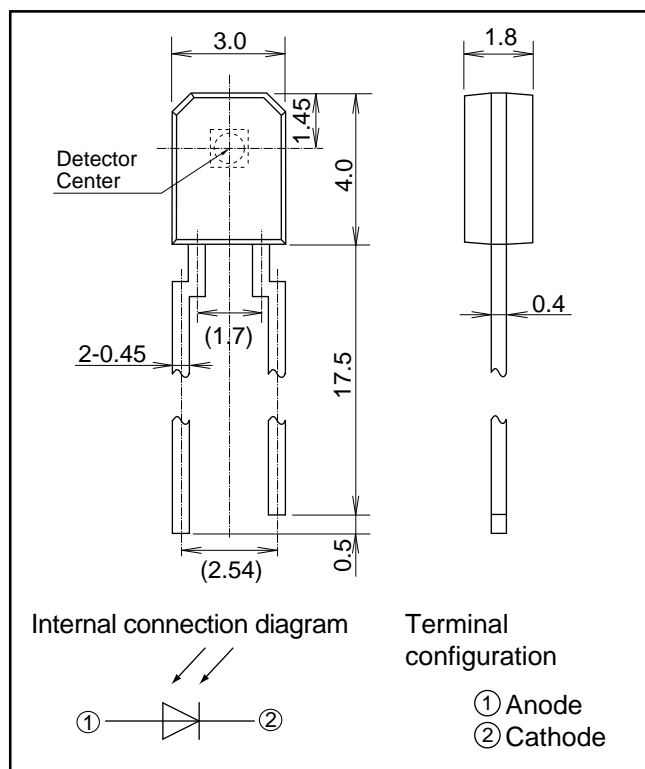
- (1) High speed response
(Response frequency TYP. 400 MHz)
CD-R/RW : 12× speed writing
- (2) High sensitivity (Sensitivity TYP. 0.55 A/W)
- (3) Compact and thin package
(Package dimensions: 4.0 × 3.0 × 1.8 mm)

Applications

- (1) CD-R drives
- (2) CD-RW drives

Outline Dimensions

(Unit:mm)

**Specifications**

(Ta=25°C)

Parameter	Symbol	MIN.	TYP.	MAX.	Unit	Condition
Short circuit current	Isc	360	450	–	nA	* Ev=100 lx
Dark current	Id	–	–	1.0	nA	V _R =5 V, E _v =0
Sensitivity	S	0.4	0.55	0.63	A/W	λ = 780 nm
Terminal capacitance	Ct	–	3.5	–	pF	V _R =5 V, f=1MHz
Peak sensitivity wavelength	λ _p	–	820	–	nm	–
Response frequency	f _c	200	400	–	MHz	V _R =5 V, R _L =50Ω, –3 dB
Operating temperature	T _{opr}	–25	–	85	°C	–

* Ev : Illuminance by CIE standard light source A (tungsten lamp)

As of June, 2001

(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://sharp-world.com/ecg/>)

SHARP

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.

OUR CERTIFICATE

DiGi provide top-quality products and perfect service for customer worldwide through standardization, technological innovation and continuous improvement. DiGi through third-party certification, we stricly control the quality of products and services. Welcome your RFQ to

Email: Info@DiGi-Electronics.com



Tel: +00 852-30501935

RFQ Email: Info@DiGi-Electronics.com

DiGi is a global authorized distributor of electronic components.