



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



# Photointerrupter with Connector

GP1A173LCS2F/GP1S173LCS2F

## Features

- Employs connector-united case and connector pin-united frame.  
Low cost by part reduction
- High operating temperature (-30 to +95 °C)  
Extending area to mount photointerrupter under high/low temperature condition in copier & LBP.
- High reliability of connection improved by combined case & connector as one part.
- Mechanical installation is compatible with conventional models. (GP1A73/GP1S73 series)

## Main Specifications

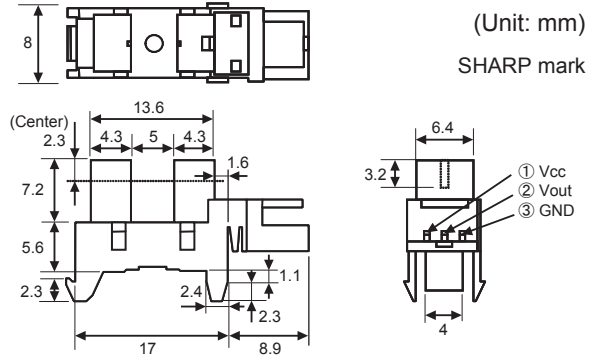
OPIC output type 【GP1A173LCS2F】

Parameter	Symbol	Characteristics
Operating supply voltage	V <sub>CC</sub>	4.5 to 5.5 V
Low level supply current	I <sub>CCL</sub>	MAX. 16.5 mA
Low level output voltage	V <sub>OL</sub>	MAX. 0.35 V
High level supply current	I <sub>CCH</sub>	MAX. 16.5 mA
High level output voltage	V <sub>OH</sub>	MIN. V <sub>CC</sub> × 0.9 V
Response characteristics	MIN. interruption time	t <sub>H</sub> MIN. 166 μs
	MIN. sensing time	t <sub>L</sub> MIN. 166 μs
Operating temperature	T <sub>opr</sub>	-30 to +95 °C

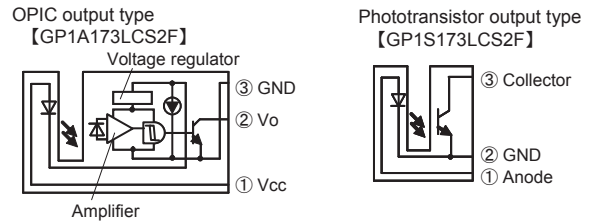
Phototransistor output type 【GP1S173LCS2F】

Parameter	Symbol	Characteristics
Forward voltage	V <sub>F</sub>	1.2 to 1.4 V
Peak forward voltage	V <sub>FM</sub>	TYP. 3 V
Reverse voltage	I <sub>R</sub>	MAX. 10 mA
Dark current	I <sub>CEO</sub>	MAX. 100 nA
Collector current	I <sub>c</sub>	MIN. 0.5 mA
Collector-emitter voltage	V <sub>CE (sat)</sub>	MAX. 0.4 V
Response characteristics	Rise time	t <sub>r</sub> MAX. 15 μs
	Fall time	t <sub>f</sub> MAX. 20 μs
Operating temperature	T <sub>opr</sub>	-30 to +95 °C

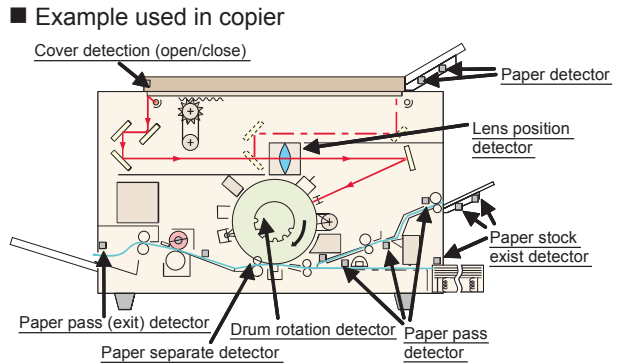
## Outline Dimensions



## Internal Connection Diagram

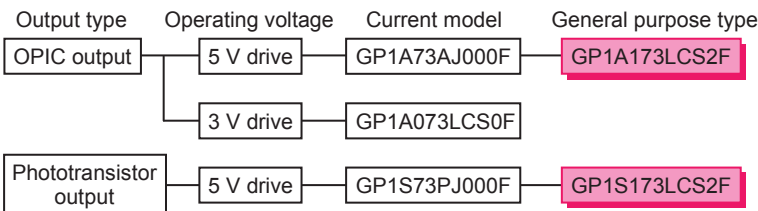


## Application



## Lineup

- Transmissive type photointerrupter with connector



■ : New product

## Applications

- Copier, Laser beam printer

■ Under 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.  
 ■ SHARP reserves the right to make changes in the contents described herein at any time without notice. Contact SHARP in order to obtain the latest device specification sheets before using any SHARP device.