

# 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

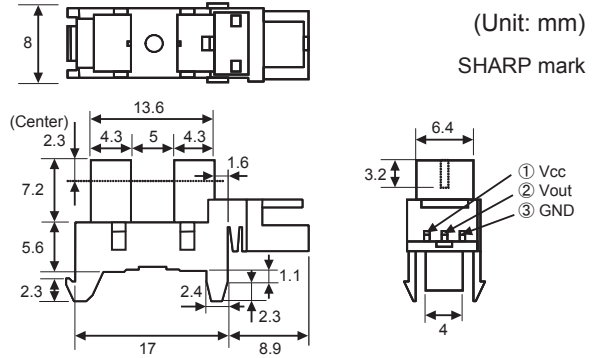
OPIC output type 【GP1A173LCS2F】

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

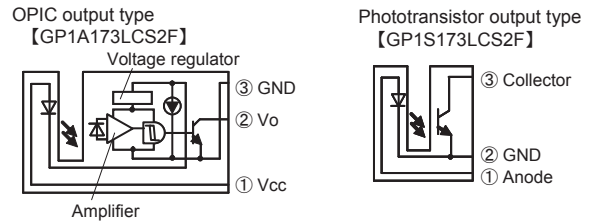
Phototransistor output type 【GP1S173LCS2F】

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

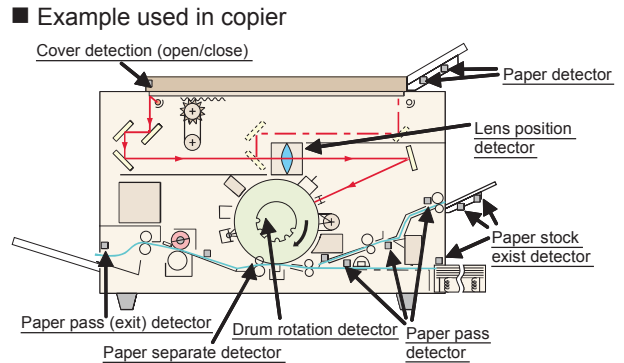
## Outline Dimensions



## Internal Connection Diagram

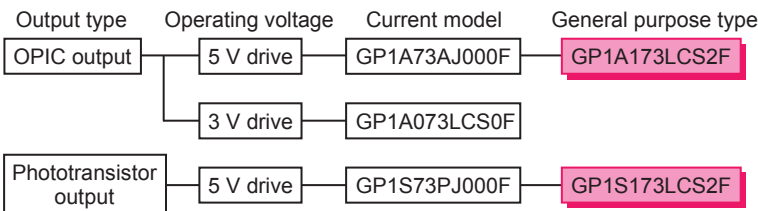


## Application



## Lineup

- Transmissive type photointerrupter with connector



■ : New product

## Applications

- Copier, Laser beam printer

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