# New Product Information

### BACK

## Compact Transmissive-type Photointerrupter



### GP1S396HCPSF/GP1S396HCP0F

Package technology that enables products to maintain optical characteristics and reliable performance, and to achieve compact form.

A lineup of compact and low-profile transmissive types with high detection accuracy.

#### **■**Features

## • More compact, lower profile

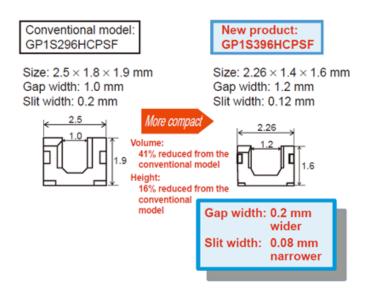
More compact size (1.6 mm low profile) than conventional model has been achieved along with widening of gap to 1.2 mm

The optimal device for development of compact lens units

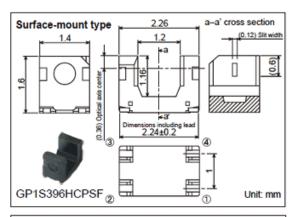
- Improved detection accuracy
- Achieves high detection accuracy with a narrow slit width (0.12 mm)

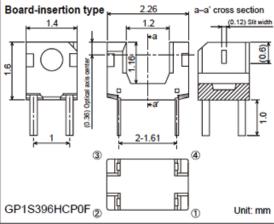
Compatible with even higher-precision lens units

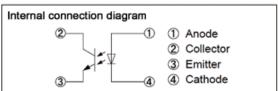
- Reduced design restrictions
- Using know-how related to assembly of light-emitting and light-receiving elements, SHARP has achieved a photocurrent MIN./MAX. variability ratio of 4
- Surface-mount type (GP1S396HCPSF) and boardinsertion type (GP1S396HCP0F) enables various types of mounting
- Halogen-free



## **■Outline Dimensions**







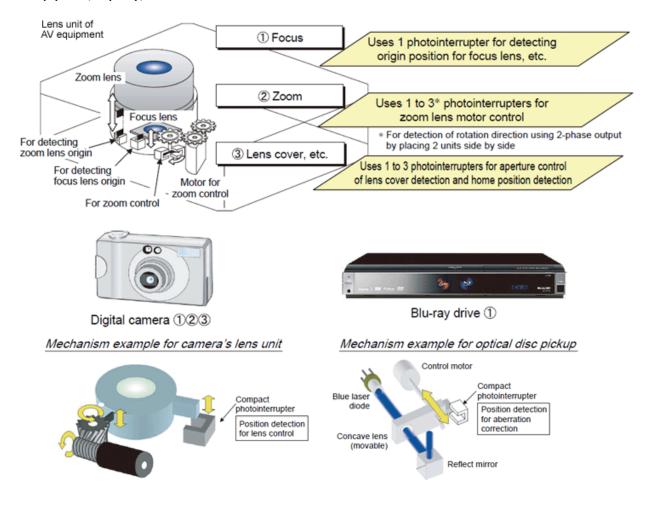
## **■**Main Specifications

 $(Ta = 25 \, ^{\circ}C)$ 

Item	Symbol	Specifications	Conditions
Forward voltage	$\mathbf{V}_{\mathrm{F}}$	MAX. 1.4 V	$I_F = 20 \text{ mA}$
Dark current	Iceo	MAX. 100nA	$V_{CE} = 20 \text{ V}$
Photocurrent	Ic	$100$ to $400\;\mu A$	$V_{CE} = 5 \text{ V}, \text{ I}_F = 5 \text{ mA}$
Collector-emitter saturation voltage	Vce(sat)	MAX. 0.4 V	$I_F=10~mA,~I_C=40~\mu A$
Operating temperature	Topr	-25 to +85 °C	-

## **■**Application Examples

- Digital camera / mobile phone with camera
- AV equipment (BD recorder/DVC)
- OA Equipment (BD pickup)



Back to top

© 2012 SHARP CORPORATION SHARP CORPORATION SHARP CORPORATION

5/14/2012