SHARP

Under development

New product

GP1S096HCZ

Photointerrupter

Subminiature, Low height, Transmissive Type Photointerrupter

Features

(1) General purpose

(2) Wide gap(Gap width: 1.0mm)(3) Low height(Height: 2.9mm)(4) Slit width(Detector side): 0.3mm

Applications

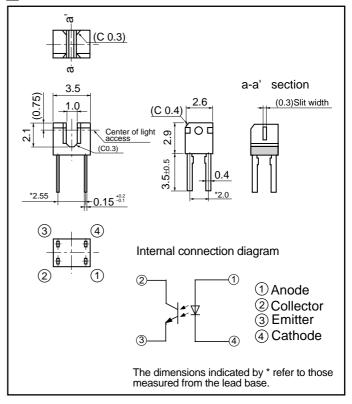
(1) Cameras

(2) CD-ROM drives

(3) DVD-ROM drives

(4) VCR

Outline Dimensions



Absolute Maximum Ratings

(Ta=25°C)

				(1a-25 C)
Parameter		Symbol	Rating	Unit
Input	Forward current	I_{F}	50	mA
	Reverse voltage	V_R	6	V
	Power dissipation	P	75	mW
Output	Collector-emitter voltage	V_{CEO}	35	V
	Emitter-collector voltage	V_{ECO}	6	V
	Collector current	I_{C}	20	mA
	Collector power dissipation	P _C	75	mW
Total power dissipation		P _{tot}	100	mW
Operating temperature		T_{opr}	-25 to +85	°C
Storage temperature		T _{stg}	-40 to +100	°C
*1 Soldering temperature		T_{sol}	260	°C

^{*1} For 5s

(Notice)

(Internet)

 $[\]bullet Data \ for \ Sharp's \ optoelectronic/power \ devices \ is \ provided \ on \ internet. \ \ (Address \ http://www.sharp.co.jp/ecg/)$



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SHARP

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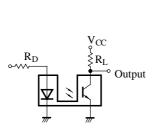
Photointerrupter

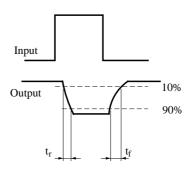
■ Electro-optical Characteristics

(Ta=25°C)

Parameter		Symbol	Conditions	MIN.	TYP.	MAX.	Unit	
Input	Forward voltage		V_{F}	I _F =20mA	_	1.2	1.4	V
	Reverse current		IR	V _R =3V	_	_	10	μΑ
Output	Collector dark current		Iceo	Vce=20V	_	_	100	nA
Transfer characteristics	Collector current		Ic	I _F =5mA, V _{CE} =5V	100	_	400	μΑ
	Collector-emitter saturation votlage		V _{CE(sat)}	I _F =10mA, I _C =40μA	_	_	0.4	V
	Response time	Rise time	tr	Ic=100 μ A, Vce=5V, Rl=1k Ω	_	50	150	μs
		Fall time	t f		_	50	150	μs

Measuring Circuit of Response Time





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 - Consumer electronics
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 - Alarm equipment
 - Various safety devices, etc.
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