

# GP1S094HCZ

## Subminiature, Wide gap, Transmissive Type Photointerrupter

### ■ Features

1. General purpose
2. Wide gap (Gap width:3.0mm)
3. Slit width (Detector side):0.3mm

### ■ Applications

1. Cameras
2. CD-ROM drives
2. DVD-ROM drives
3. VCR

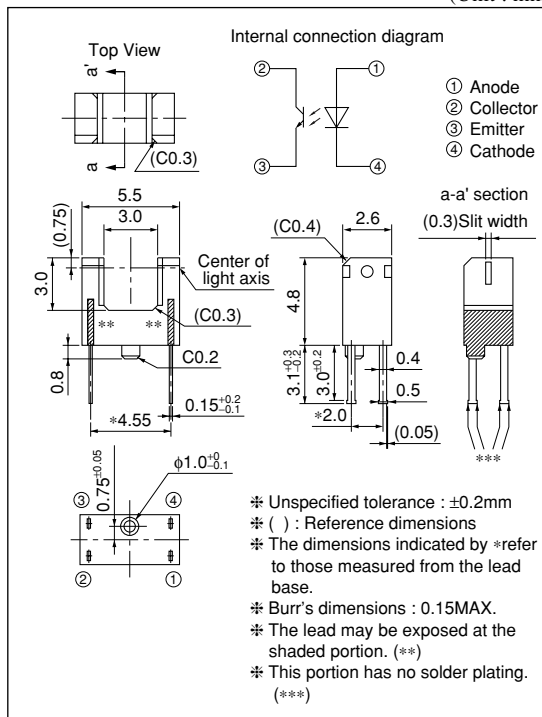
### ■ Absolute Maximum Ratings (T<sub>a</sub>=25°C)

	Parameter	Symbol	Rating	Unit
Input	Forward current	I <sub>F</sub>	50	mA
	Reverse voltage	V <sub>R</sub>	6	V
	Power dissipation	P	75	mW
Output	Collector-emitter voltage	V <sub>CEO</sub>	35	V
	Emitter-collector voltage	V <sub>ECO</sub>	6	V
	Collector current	I <sub>C</sub>	20	mA
	Collector power dissipation	P <sub>C</sub>	75	mW
	Total power dissipation	P <sub>tot</sub>	100	mW
	Operating temperature	T <sub>opr</sub>	-25 to +85	°C
	Storage temperature	T <sub>stg</sub>	-40 to +100	°C
	*1 Soldering temperature	T <sub>sol</sub>	260	°C

\*1 For MAX. 5s

### ■ Outline Dimensions

(Unit : mm)

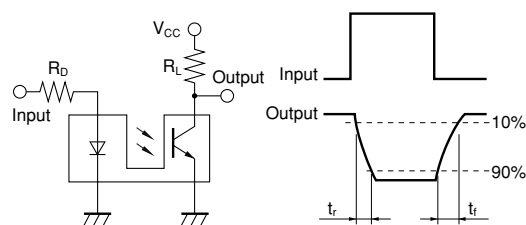


Electro-optical Characteristics

(T<sub>a</sub>=25°C)

Parameter		Symbol	Conditions	MIN.	TYP.	MAX.	Unit
Input	Forward voltage	V <sub>F</sub>	I <sub>F</sub> =20mA	—	1.2	1.4	V
	Reverse current	I <sub>R</sub>	V <sub>R</sub> =3V	—	—	10	μA
Output	Collector dark current	I <sub>CEO</sub>	V <sub>CE</sub> =20V	—	—	100	nA
Transfer characteristics	Collector current	I <sub>C</sub>	I <sub>F</sub> =5mA, V <sub>CE</sub> =5V	40	—	400	μA
	Collector-emitter saturation voltage	V <sub>CE(sat)</sub>	I <sub>F</sub> =10mA, I <sub>C</sub> =40μA	—	—	0.4	V
	Response time	Rise time	I <sub>C</sub> =100μA, V <sub>CE</sub> =5V, R <sub>L</sub> =1kΩ	—	50	150	μs
		Fall time		—	50	150	μs

Test Circuit for Response Time



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    - Alarm equipment
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