

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

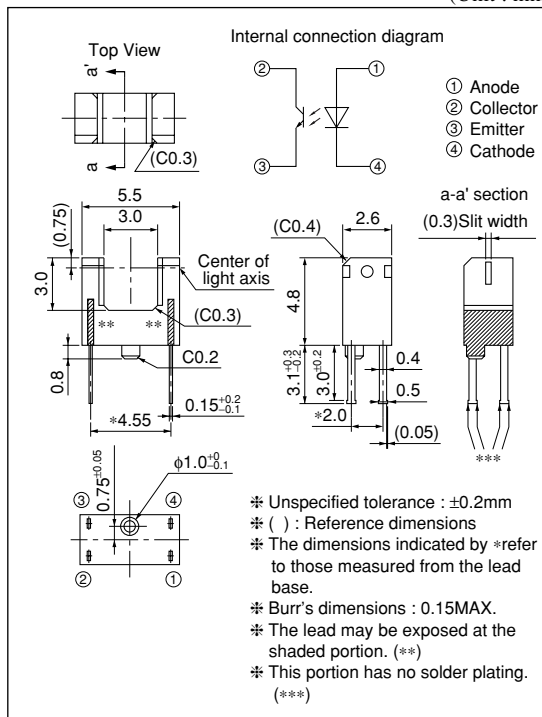
■ Absolute Maximum Ratings (T_a=25°C)

	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 MAX. 5s

■ Outline Dimensions

(Unit : mm)

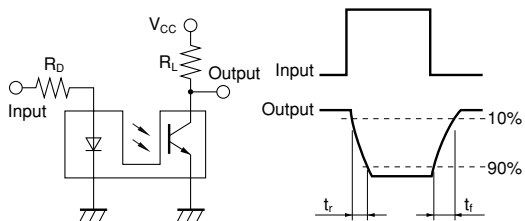


Electro-optical Characteristics

(T_a=25°C)

Parameter	Symbol	Conditions	MIN.	TYP.	MAX.	Unit	
Input	Forward voltage	V_F	$I_F=20\text{mA}$	—	1.2	1.4	V
	Reverse current	I_R	$V_R=3\text{V}$	—	—	10	μA
Output	Collector dark current	I_{CEO}	$V_{CE}=20\text{V}$	—	—	100	nA
Transfer characteristics	Collector current	I_C	$I_F=5\text{mA}, V_{CE}=5\text{V}$	40	—	400	μA
	Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_F=10\text{mA}, I_C=40\mu\text{A}$	—	—	0.4	V
	Response time	Rise time	t_r	$I_C=100\mu\text{A}, V_{CE}=5\text{V},$ $R_L=1\text{k}\Omega$	—	50	150
Fall time		t_f	—		50	150	μs

Test Circuit for Response Time



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