

SG - 205

The SG - 205 photointerrupter high - performance standard type, combines high - output GaAs IRED with high sensitive phototransistor.

FEATURES

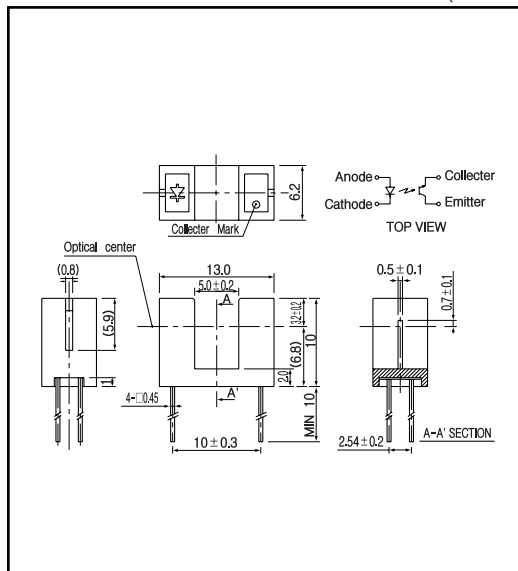
- High performance
- High - speed response
- 5mm gap.
- Widely applicable

APPLICATIONS

- Tape - end sensors
- Timing sensors
- Edge sensors
- Copiers

DIMENSIONS

(Unit : mm)



MAXIMUM RATINGS

(Ta=25 °C)

Item	Symbol	Rating	Unit
Input	Power dissipation	P _D	100
	Reverse voltage	V _R	5
	Forward current	I _F	60
	Pulse forward current *1	I _{FP}	1
Output	Collector power dissipation	P _C	100
	Collector current	I _C	40
	C - E voltage	V _{CE0}	30
	E - C voltage	V _{ECO}	5
Operating temp.		T _{opr.}	- 20 ~ +85
Storage temp.		T _{stg.}	- 30 ~ +85
Soldering temp. *2		T _{sol.}	240

*1. t w 100 μsec. period : T=10msec.

*2. For MAX. 5 seconds at the position of 2mm from the package

ELECTRO-OPTICAL CHARACTERISTICS

(Ta=25 °C)

Item	Symbol	Conditions	Min.	Typ.	Max.	Unit.
Input	Forward voltage	V _F	I _F =30mA	1.2	1.5	V
	Reverse current	I _R	V _R =5V		10	μA
	Capacitance	C _t	V=0, f=1KHz	25		pF
	Peak wavelength	λ _p		940		nm
Output	Collector dark current	I _{CE0}	V _{CE} =10V		0.1	μA
Light current	I _L	V _{CE} =5V, I _F =20mA	0.5			mA
C - E saturation voltage		V _{CE(sat)}	I _F =30mA, I _C =0.2mA		0.4	V
Switching speeds	Rise time	t _r	V _{CC} =5V, I _F =2mA	5		μsec.
	Fall time	t _f	R _L =100Ω	5		μsec.

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