

Photointerrupters(Transmissive)

KODENSHI

LG - 206

The LG - 206 photointerrupter combine high output GaAs IRED with photo IC.

The sensor makes possible easy development of objectdetecting systems with high performance, high reliability and small equipment size.

FEATURES

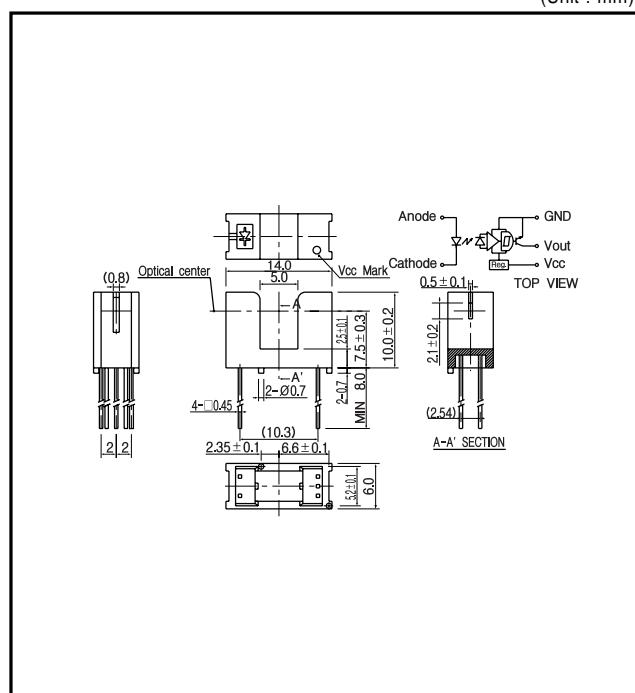
- Built - in amplifier
- Open collector output

APPLICATIONS

- Floppy disk drives
- Copiers
- Facsimiles

DIMENSIONS

(Unit : mm)



MAXIMUM RATINGS

(Ta=25)

Item		Symbol	Rating	Unit
Input	Power dissipation	P _D	100	mW
	Reverse voltage	V _R	5	V
	Forward current	I _F	60	mA
Output	Supply voltage	V _{CC}	16	V
	Low level output current	I _{OL}	30	mA
	Power dissipation	P	200	mW
Operating temp.		Topr.	- 20 ~ +85	
Storage temp.		Tstg.	- 30 ~ +85	
Soldering temp. ¹⁾		Tsol.	260	

*1. For MAX. 5 seconds at the position of 1mm from the package

ELECTRO-OPTICAL CHARACTERISTICS

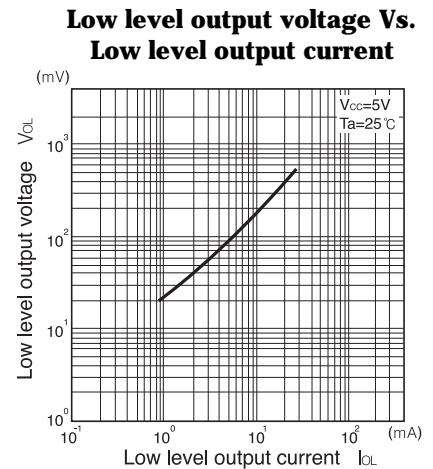
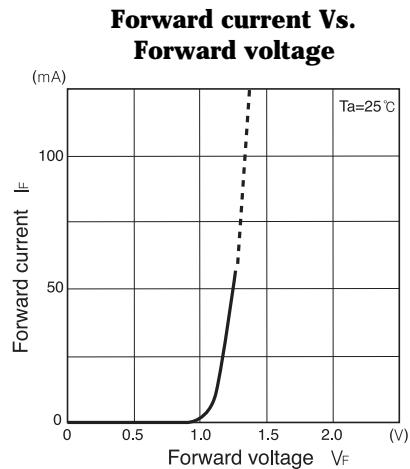
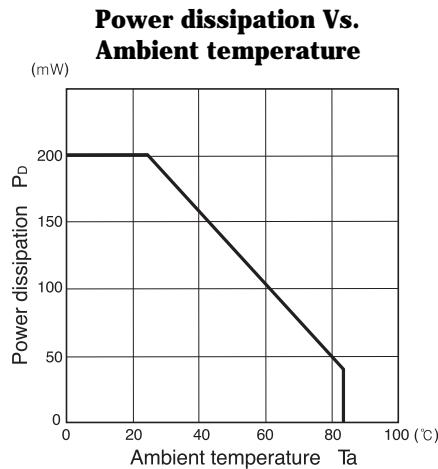
(Ta=25)

Item		Symbol	Conditions	Min.	Typ.	Max.	Unit.
Input	Forward voltage	V _F			1.2	1.4	V
	Reverse current	I _R	V _R =5V			10	μA
	Peak wavelength	λ _p			940		nm
Output	Operating supply voltage range	V _{CC}		4.5		17	V
	Low level output voltage	V _{OL}	I _{OL} =16mA, V _{CC} =5V, I _F =0		0.3	0.4	V
	High level output voltage ²⁾	V _{OH}	I _{OL} =12mA, V _{CC} =5V, R _L =10K	4.5			V
Transm - ission	Low level supply current	I _{CCL}	V _{CC} =5V, I _F =0		3	10	mA
	High level supply current	I _{CCH}	V _{CC} =5V, I _F =10mA		2	10	mA
	L _H H threshold input current	I _{FLH}	V _{CC} =5V		5	12	mA
	Hysteresis	I _{FLH} /I _{PHL}	V _{CC} =5V	0.60	0.83	0.98	-
	L _H H propagation time ³⁾	t _{PLH}	V _{CC} =5V, I _F =18mA		1		μsec.
	H _L L propagation time ³⁾	t _{PHL}	R _L =3.3K		3		

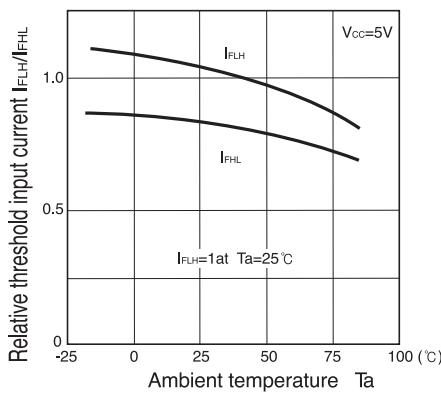
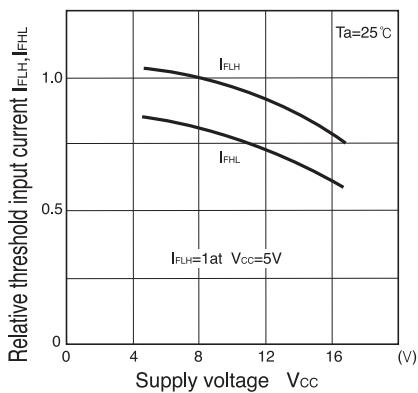
*2, *3. refer to measurement diagram as right side.

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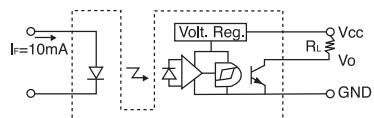
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Relative threshold input current Vs. Supply voltage **Relative threshold input current Vs. Ambient temperature**



Measurement of high level output voltage



Measurement of propagation time

