CL - 205

The CL - 205 is a high - power GaAlAs IRED, with precision optical designed lens. It emits parallel infrared lights.

FEATURES

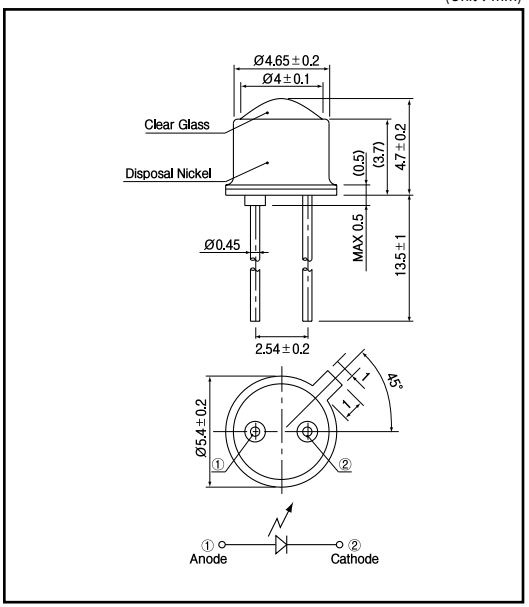
- TO - 18 can type with glass lense
- Peak emission wavelength λp = 880nm
- Illuminant for the parallel light
- High reliability

APPLICATIONS

- Encoders

DIMENSIONS

(Unit : mm)



MAXIMUM RATINGS

(Ta = 25℃)

Item	Symbol	Rating	Unit
Reverse voltage	V_R	3	V
Forward current	I_F	80	mA
Power dissipation	P_D	160	mW
Pulse forward current *1	I_{FP}	0.8	A
Operating temp.	Topr.	−30 +100	℃
Storage temp.	Tstg.	−40 +125	℃
Soldering temp. *2	Tsol.	260	℃

*1. pulse width : tw ≦ 100 μsec. period : T = 10msec.
*2. For MAX.5 seconds at the position of 2 mm from the package

ELECTRO-OPTICAL CHARACTERISTICS

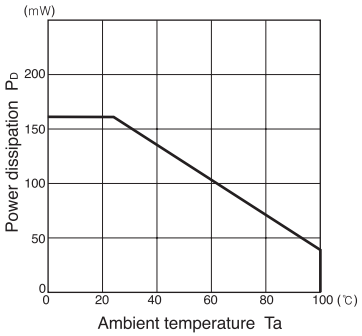
(Ta = 25℃)

Item	Symbol	Conditions	Min.	Typ.	Max.	Unit.
Forward voltage	V_F	I_F = 50mA		1.5	2.0	V
Reverse current	I_R	V_R = 3V			10	μA
Peak emission wavelength	λp	I_F = 50mA		870		nm
Spectral bandwidth	Δλ	I_F = 50mA		50		nm
Radiant intensity *3	P_O	I_F = 50mA		10		mW
Half angle	Δθ				±9	deg.

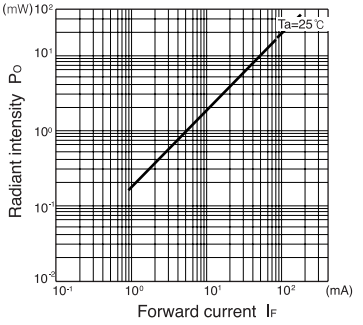
*3. Measured by tester of KODENSHI CORP.

CL - 205

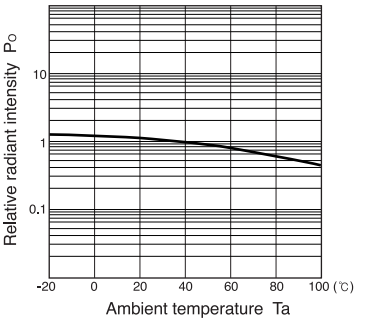
Power dissipation Vs. Ambient temperature



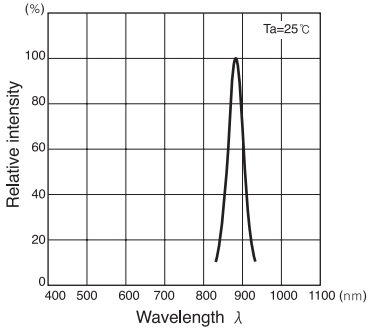
Radiant intensity Vs. Forward current



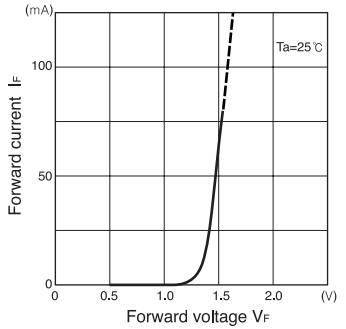
Relative radiant intensity Vs. Ambient temperature



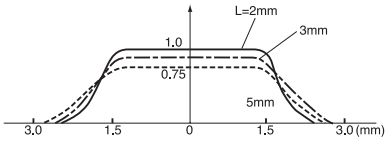
Relative intensity Vs. Wavelength



Forward current Vs. Forward voltage



RADIATION PATTERN



Relative radiant intensity Vs. Distance