

CL - 209

The CL - 209 is a high - power GaAlAs IRED mounted in a TO - 46 metal stem with clear epoxy encapsulation, providing wide beam angle.

FEATURES

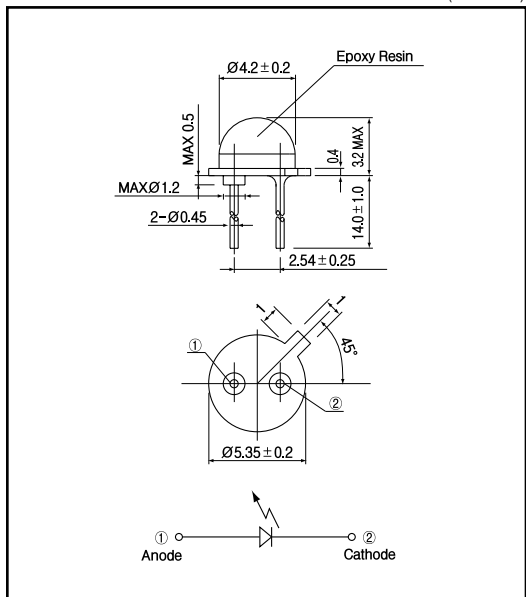
- High output power
- Wide beam angle ±85deg.
- TO - 46 epoxy potting type

APPLICATIONS

- Optical switches
- Transportation sensors

DIMENSIONS

(Unit : mm)



MAXIMUM RATINGS

(Ta=25)

Item	Symbol	Rating	Unit
Reverse voltage	V _R	5	V
Forward current	I _F	80	mA
Power dissipation	P _D	130	mW
Pulse forward current *1	I _{FP}	0.8	A
Operating temp.	T _{opr.}	- 20 +80	
Storage temp.	T _{stg.}	- 20 +80	
Soldering temp. *2	T _{sol.}	240	

*1. pulse width : t_w 100 µsec, period : T=10msec.

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

ELECTRO-OPTICAL CHARACTERISTICS

(Ta=25)

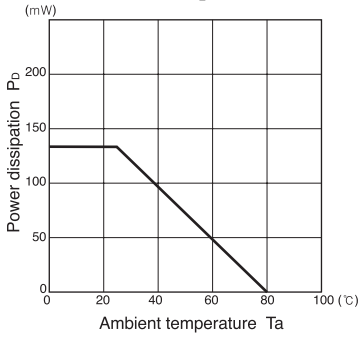
Item	Symbol	Conditions	Min.	Typ.	Max.	Unit.
Forward voltage	V _F	I _F =20mA		1.3	1.6	V
Reverse current	I _R	V _R =5V			10	µA
Peak emission wavelength *3	λ _p	I _F =50mA		880		nm
Spectral bandwidth		I _F =50mA		70		nm
Radiant intensity	P ₀	I _F =20mA		30		mW
Half angle				± 85		deg.

*3. Measured by tester of KODENSHI CORP.

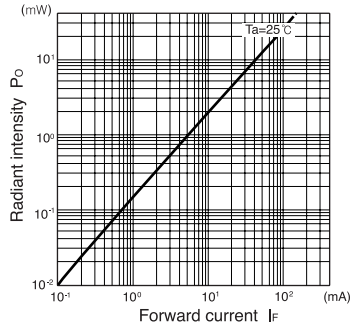
Infrared Emitting Diodes(GaAlAs)

CL - 209

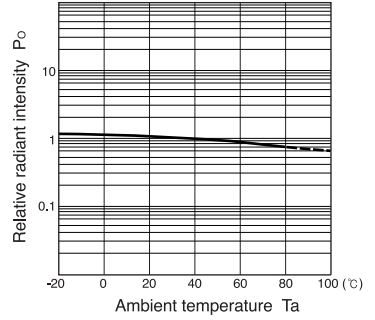
Power dissipation Vs. Ambient temperature



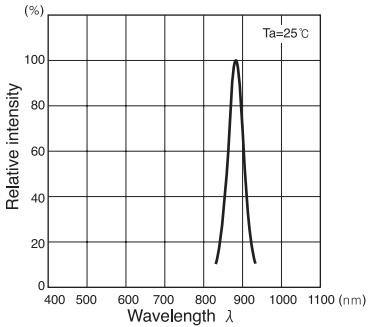
Radiant intensity Vs. Forward current



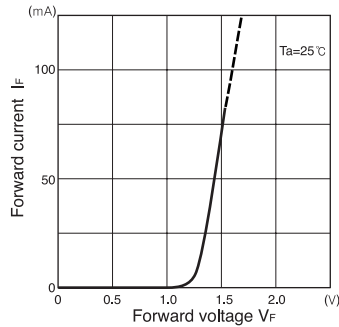
Relative radiant intensity Vs. Ambient temperature



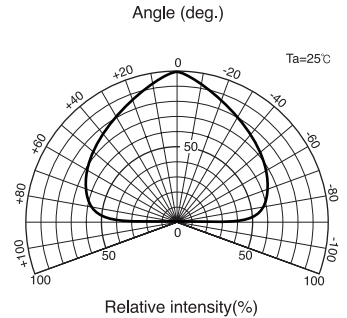
Relative intensity Vs. Wavelength



Forward current Vs. Forward voltage



Radiant Pattern



Relative radiant intensity Vs. Distance

