Pin-Point LED(AlGaInP)

KODENSHI

BL05 - 1101

The BL05 - 1101 is a LED of 650nm wavelength using four elements (AlGaInP). Our original LED processing technology made it possible to increase the electric current density at the emission point. The luminous strength of single light source per unit surface is now more than ten times higher than before.

FEATURES

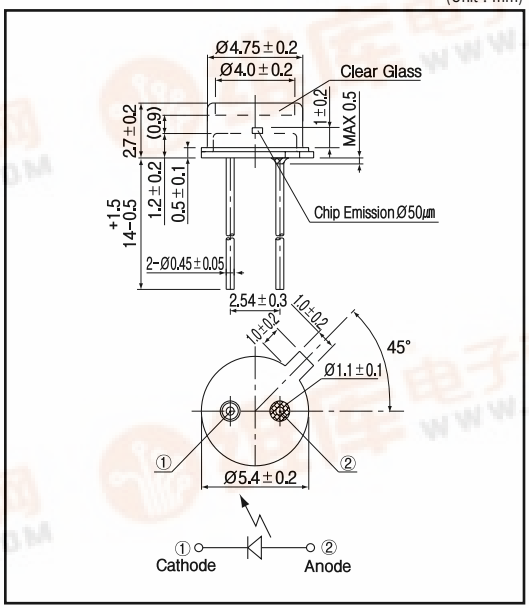
- High brightness
- The Optical axis match is easy because of red luminance.
- Optical design is easy because of the point light of ø50μm

APPLICATIONS

- Source of light for optical switch , optical fiber , and scanner
- Source of light for optical sensor parallel light
- Source of light for various , precise measurements

DIMENSIONS

(Unit : mm)



MAXIMUM RATINGS

(Ta=25℃)

Item	Symbol	Rating	Unit
Reverse voltage	V_R	3	V
Forward current	I_F	20	mA
Power dissipation	P_D	50	mW
Pulse forward current *1	I_{FP}	150	mA
Operating temp.	Topr.	−30 +85	℃
Storage temp.	Tstg.	−40 +100	℃
Soldering temp. *2	Tsol.	260	℃

*1. pulse width ：tw ≦10 μsec.period ：T=1msec.
*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		2.0	3.0	V
Reverse current	I_R	V_R=3V			10	μA
Radiant intensity	P_O(W)	I_F=20mA		0.2		mW
Peak emission wavelength	λp	I_F=20mA		650		nm
Spectral bandwidth 50%	Δλ	I_F=20mA		30		nm
Half angle	Δθ	I_F=20mA		±60		deg.

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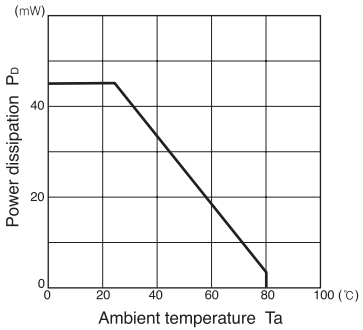
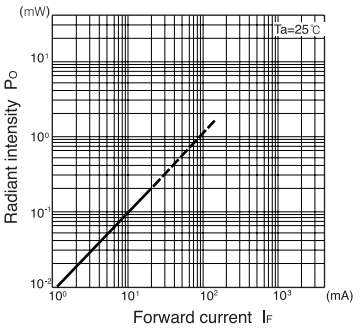
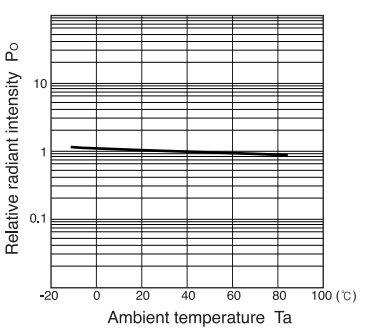
Power dissipation Vs. Ambient temperature



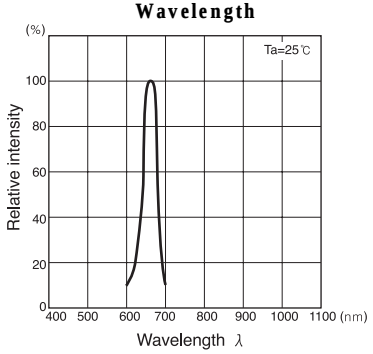
Radiant intensity Vs. Forward current



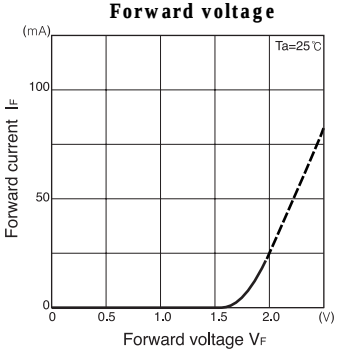
Relative radiant intensity Vs. Ambient temperature



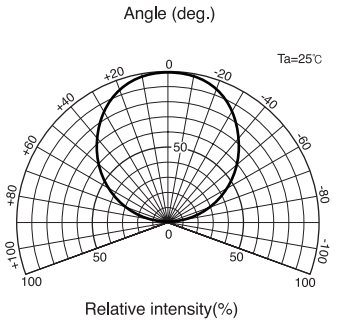
Relative intensity Vs. Wavelength



Forward current Vs. Forward voltage



Radiant Pattern



Relative radiant intensity Vs. Distance