

# LNA4905L

## GaAs Infrared Light Emitting Diode

For optical control equipment

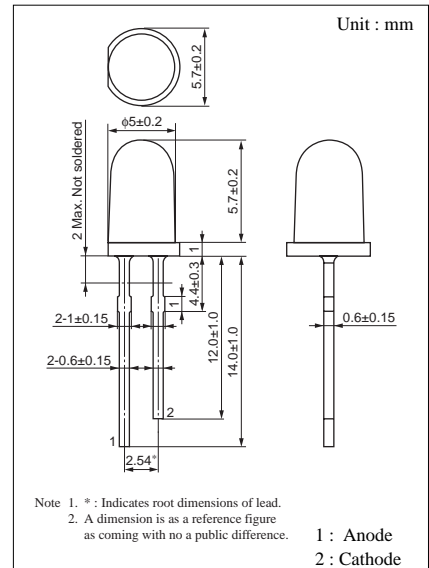
### ■ Features

- High output power, high-efficiency : (15 mW min.)
- Quick response, high speed modulation ( $f_c=30$  MHz typ.)
- Transparent epoxy resin package

### ■ Absolute Maximum Ratings $T_a=25^\circ\text{C}$

Parameter	Symbol	Ratings	Unit
Power dissipation	$P_D$	190	mW
Forward current(DC)	$I_F$	100	mA
Pulse forward current *	$I_{FP}$	1	A
Reverse voltage(DC)	$V_R$	3	V
Operating ambient temperature	$T_{opr}$	-25 to +85	$^\circ\text{C}$
Storage temperature	$T_{stg}$	-30 to +100	$^\circ\text{C}$

Note) \* :  $f=100$  Hz, Duty cycle=0.1%



### ■ Electro-optical $T_a=25^\circ\text{C}\pm 3^\circ\text{C}$

Parameter	Symbol	Conditions	min	typ	max	Unit
Total power output	$P_O$	$I_F=50$ mA	15			mW
Peak emission wavelength	$\lambda_p$	$I_F=50$ mA		880		nm
Spectral half band width	$\Delta\lambda$	$I_F=50$ mA		50		nm
Forward voltage (DC)	$V_F$	$I_F=100$ mA		1.7	2.1	V
Reverse current (DC)	$I_R$	$V_F=3$ V			10	$\mu\text{A}$
Half-power angle	$\theta$	The angle when the beam intensity is halved		15		deg

Note) 1. Cut-off frequency : 30 MHz

2. LED might radiate red light under large current drive.