

LN64

GaAs Infrared Light Emitting Diode

For Optical Control Systems

■ Features

- High-power output: $P_o=7\text{mW}$ (typ.)
- Suited for use with silicon photo detectors
- Good linearity (P_o vs I_F)
- Wide beam angle: $\theta=45$ deg. (typ.)
- Transparent epoxy package

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

Item	Symbol	Value	Unit
Power Dissipation	P_D	160	mW
Forward Current (DC)	I_F	100	mA
Pulse Forward Current	I_{FP}^*	1.5	A
Reverse Voltage (DC)	V_R	3	V
Operating Ambient Temperature	T_{opr}	$-25\sim+85$	$^{\circ}\text{C}$
Storage Temperature	T_{stg}	$-40\sim+100$	$^{\circ}\text{C}$

* $f=100\text{Hz}$, Duty Cycle=0.1%

■ Electro-Optical Characteristics ($T_a=25^{\circ}\text{C}$)

Item	Symbol	Condition	min.	typ.	max.	Unit
Optical Power Output	P_o	$I_F=50\text{mA}$	3.5	7		mW
Peak Emission Wavelength	λ_P	$I_F=50\text{mA}$		950		nm
Spectral Band Width	$\Delta\lambda$	$I_F=50\text{mA}$		50		nm
Forward Voltage (DC)	V_F	$I_F=100\text{mA}$		1.3	1.6	V
Reverse Current (DC)	I_R	$V_R=3\text{V}$			10	μA
Capacitance between Terminals	C_t	$V_R=0$, $f=1\text{MHz}$		35		pF
Beam Half Angle	θ	Measured from the optical axis to the half power point		45		deg.



