

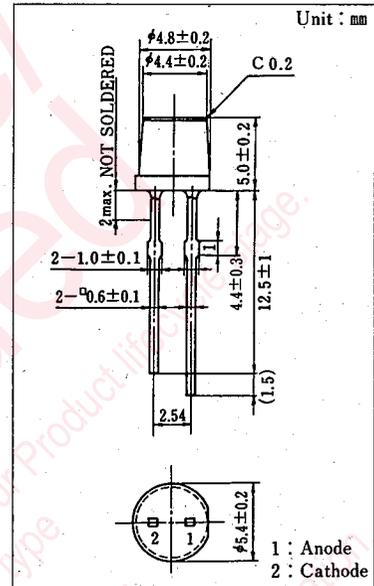
# LN64

## 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



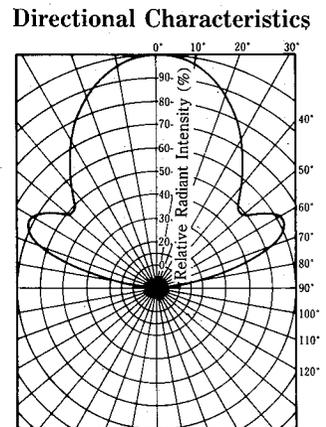
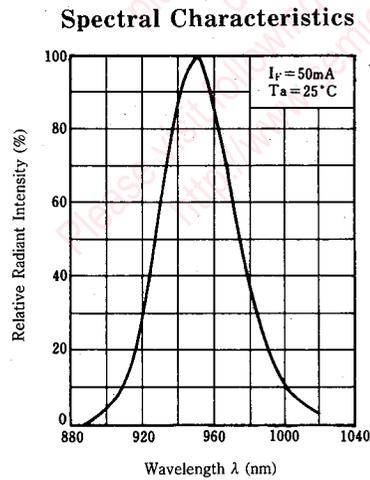
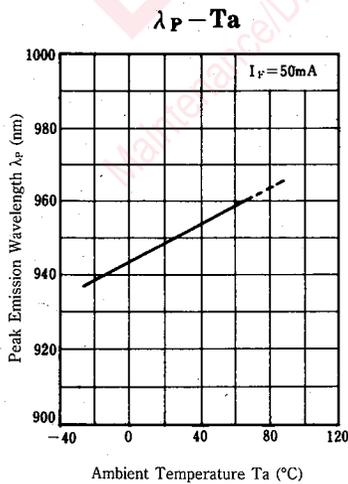
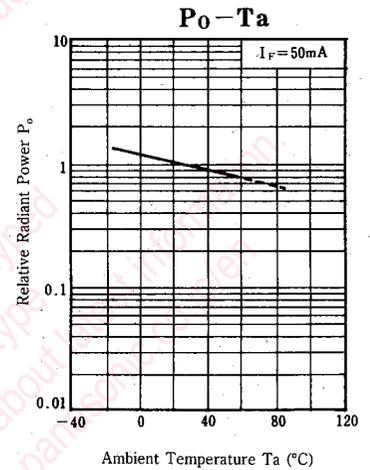
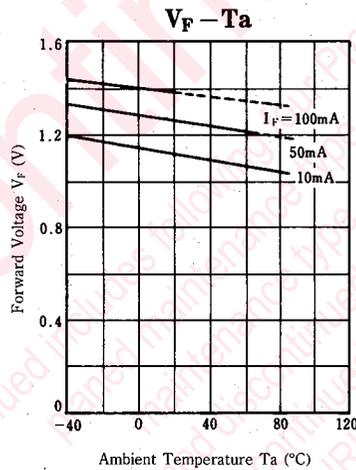
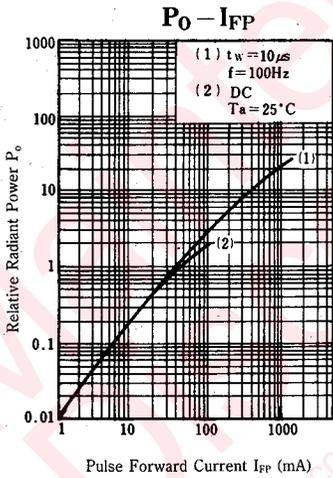
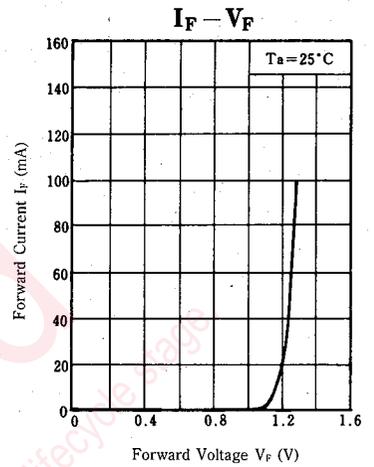
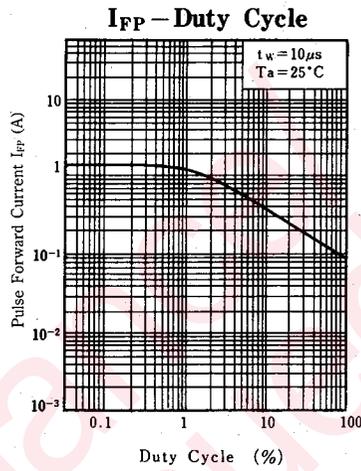
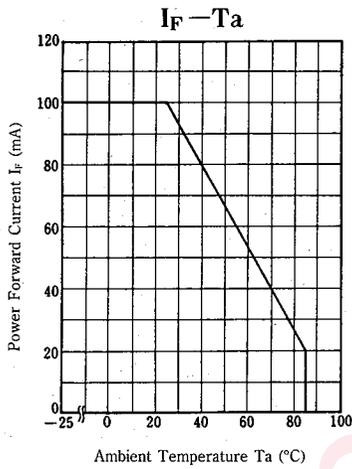
#### ■ Absolute Maximum Ratings (Ta=25°C)

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 ~ +85	°C
Storage Temperature	$T_{stg}$	-40 ~ +100	°C

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

#### ■ Electro-Optical Characteristics (Ta=25°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	$\lambda_P$	$I_F=50\text{mA}$		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	$\mu\text{A}$
Capacitance between Terminals	$C_t$	$V_R=0, f=1\text{MHz}$		35		pF
Beam Half Angle	$\theta$	Measured from the optical axis to the half power point		45		deg.



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