

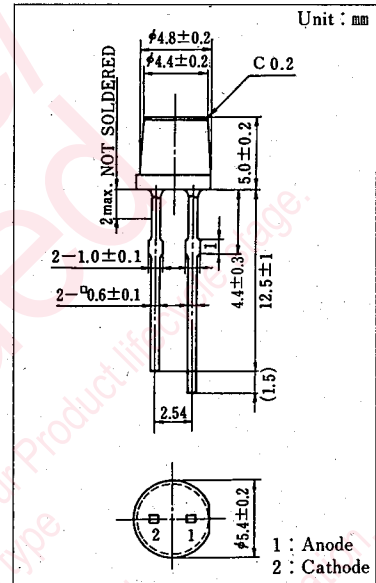
LN64

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



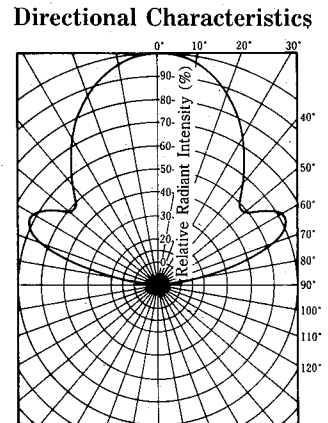
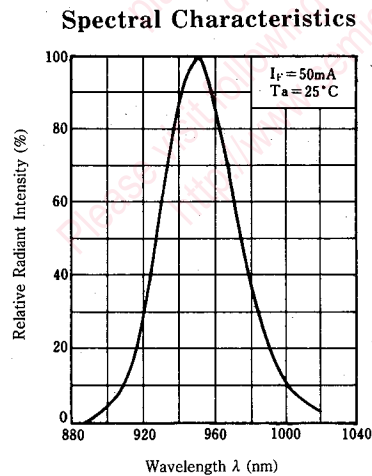
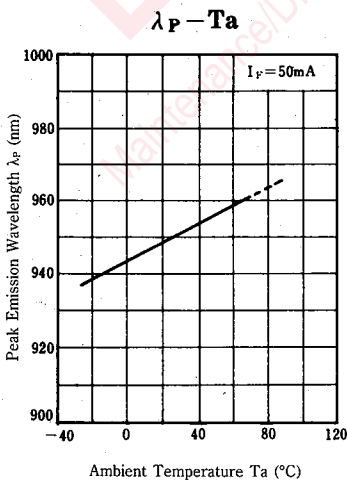
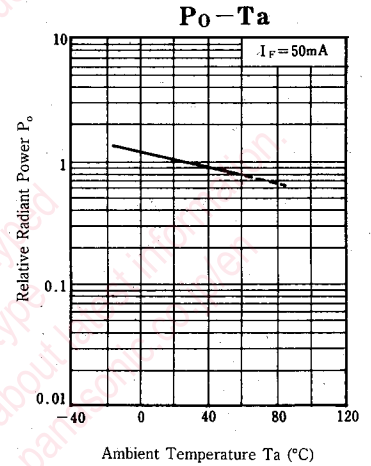
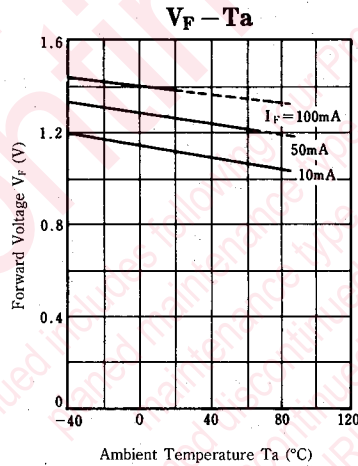
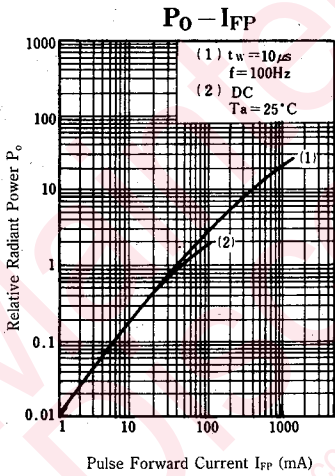
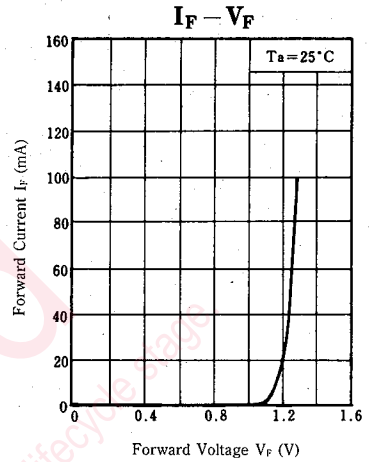
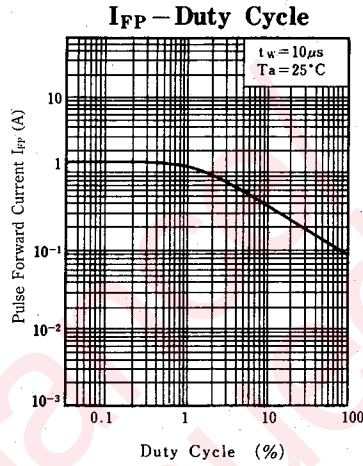
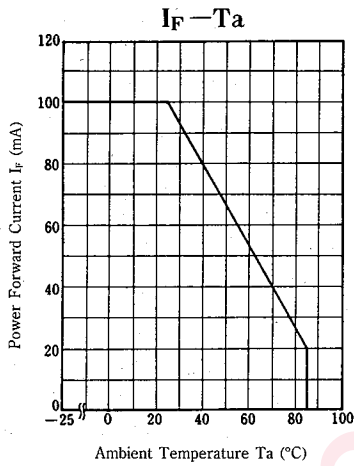
■ Absolute Maximum Ratings (Ta=25°C)

| 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 | 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. |



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