

LN66F

GaAs Infrared Light Emitting Diode

For optical control systems

■ Features

- High-power output, high-efficiency: $I_c = 13.0$ mW/sr (min.)
- Emitted light spectrum suited for silicon photodetectors
- Narrow directivity: $\theta = 15^\circ$ (typ.)
- Transparent epoxy resin package

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

Parameter	Symbol	Rating	Unit
Power dissipation	P_D	75	mW
Forward current	I_F	50	mA
Pulse forward current *	I_{FP}	1.5	A
Reverse voltage	V_R	3	V
Operating ambient temperature	T_{opr}	-25 to +85	$^\circ\text{C}$
Storage temperature	T_{stg}	-40 to +100	$^\circ\text{C}$

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

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

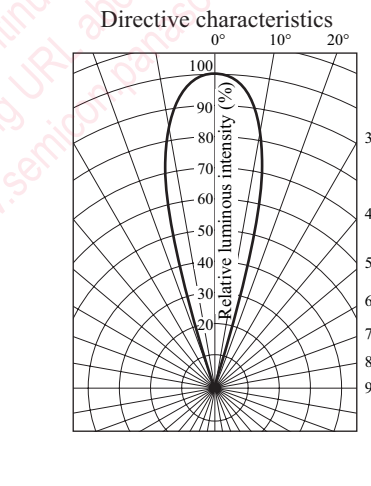
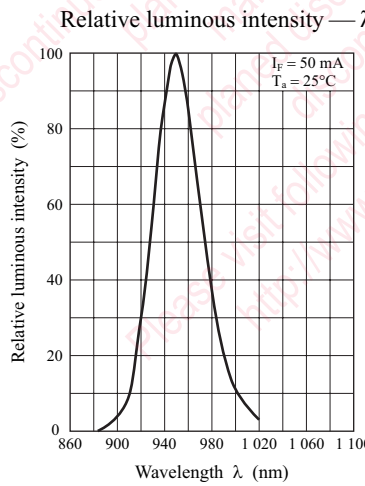
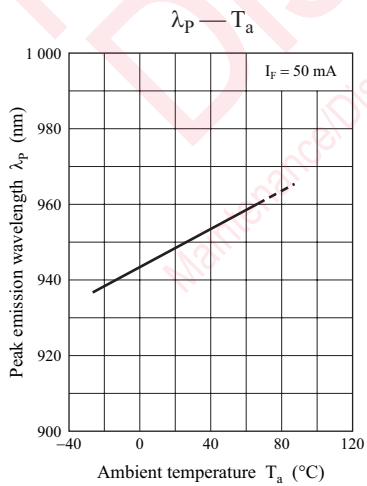
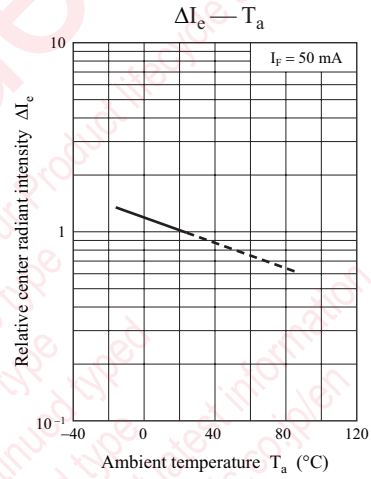
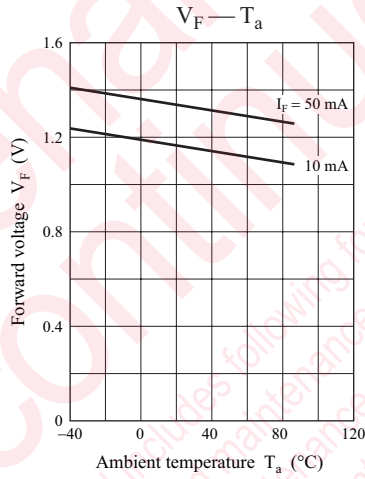
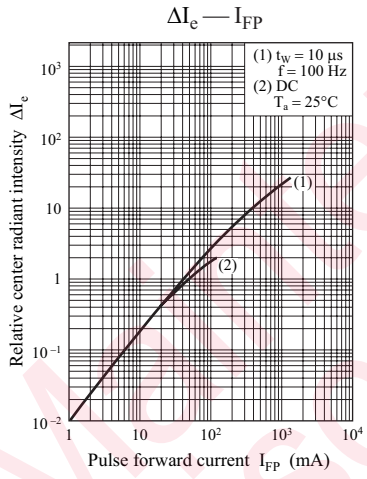
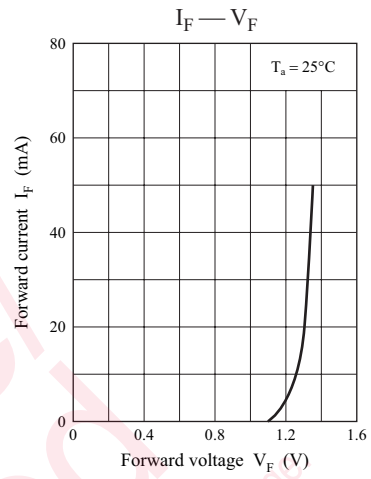
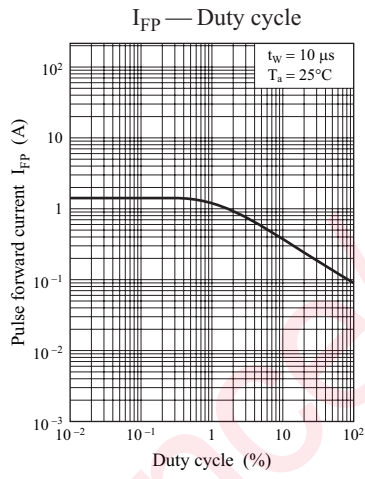
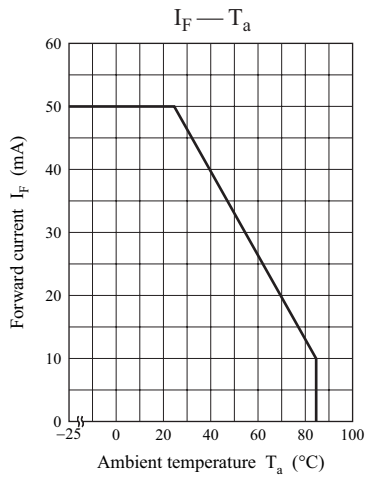
Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Center radiant intensity	I_c	$I_F = 50$ mA	13.0			mW/sr
Reverse current	I_R	$V_R = 3$ V			10	μA
Forward voltage *	V_F	$I_F = 50$ mA		1.35	1.5	V
Pulse forward current	V_{FP}	$I_{FP} = 1.0$ A			3.0	V
Terminal capacitance	C_t	$V_R = 0$ V, $f = 1$ MHz		20		pF
Peak emission wavelength	λ_p	$I_F = 50$ mA		950		nm
Spectral half band width	$\Delta\lambda$	$I_F = 50$ mA		50		nm
Half-power angle	θ	The angle when the center radiant intensity is halved.		15		$^\circ$

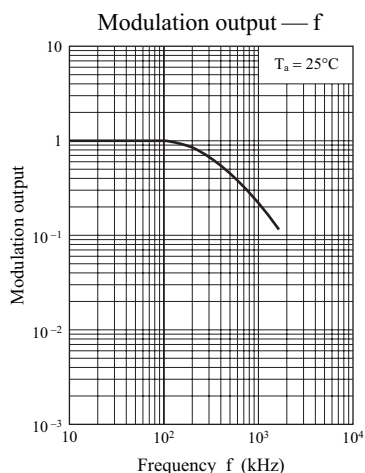
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7031 measuring methods for diodes.

2. Cutoff frequency: 1 MHz

$$f_c : 10 \times \log \frac{P_O \text{ at } f = f_c}{P_O \text{ at } f = 50 \text{ kHz}} = -3$$

3. *: $f = 100$ Hz, Duty cycle $\geq 0.1\%$

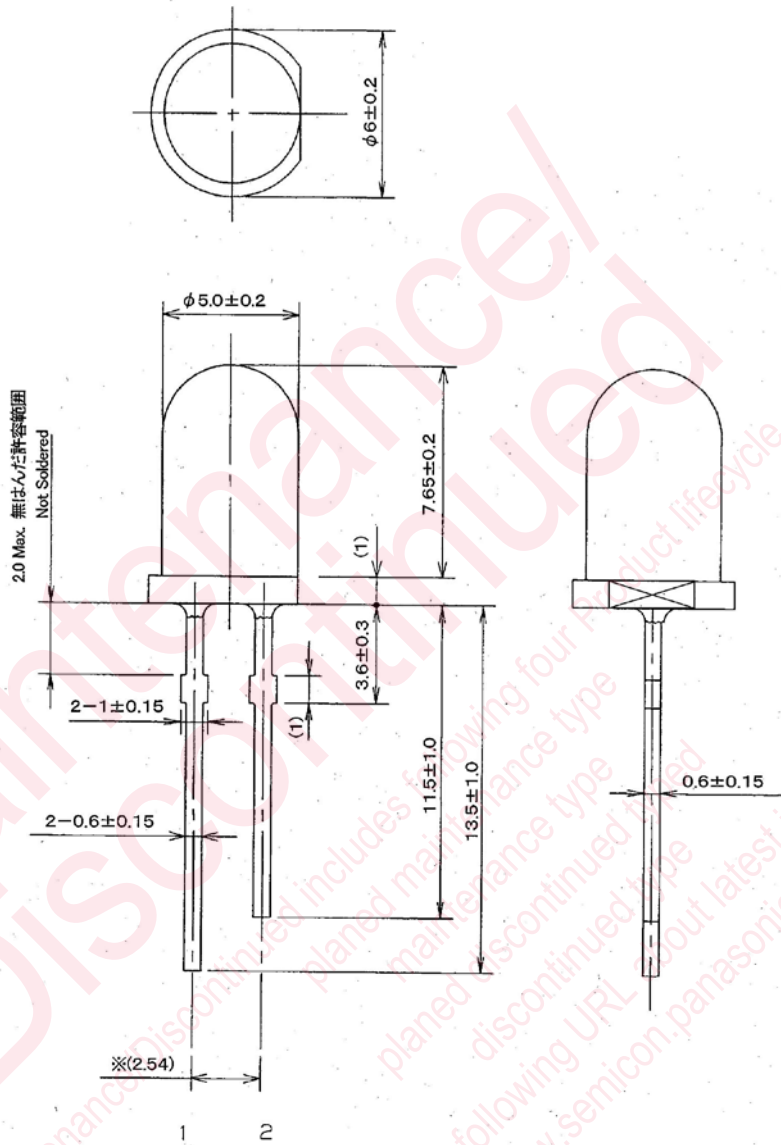




Maintenance/Discontinued includes following four Product lifecycle stage.
planned maintenance type
maintenance type
planned discontinued type
discontinued type
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■ Package (Unit: mm)

LEZLTN2S0004



- Pin name
- 1: Anode
- 2: Cathode

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