

LN66F

GaAs Infrared Light Emitting Diode

For light source of remote control systems

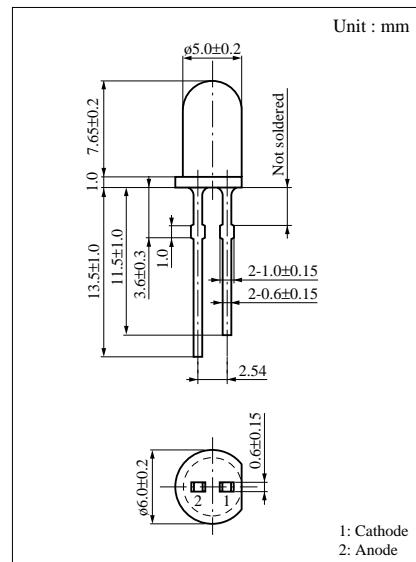
■ Features

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

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

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

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



1: Cathode
2: Anode

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

Parameter	Symbol	Conditions	min	typ	max	Unit
Radiant intensity at center	I_e	$I_F = 50\text{mA}$	13			mW/sr
Peak emission wavelength	λ_p	$I_F = 50\text{mA}$		950		nm
Spectral half band width	$\Delta\lambda$	$I_F = 50\text{mA}$		50		nm
Forward voltage (DC)	V_F	$I_F = 50\text{mA}$		1.35	1.50	V
Pulse forward voltage	V_{FP}^*	$I_{FP} = 1.0\text{A}$			3.0	V
Reverse current (DC)	I_R	$V_R = 3\text{V}$			10	μA
Capacitance between pins	C_t	$V_R = 0\text{V}$, $f = 1\text{MHz}$		20		pF
Half-power angle	θ	The angle in which radiant intensity is 50%		15		deg.

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

