

LN62S

GaAs Infrared Light Emitting Diode

For optical control systems

This product can be combined with various types of silicon photodetectors such as the PN120S to form optical controllers.

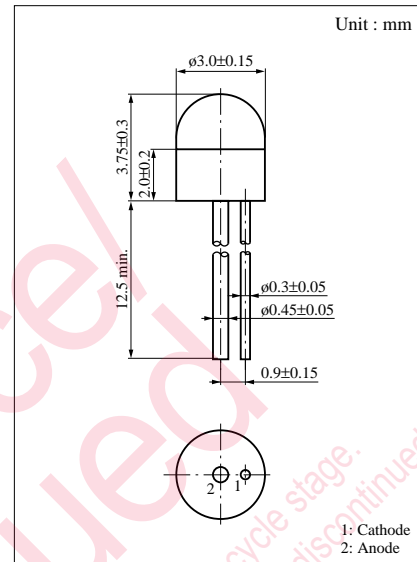
■ Features

- High-power output, high-efficiency : $P_O = 3.5 \text{ mW}$ (typ.)
- Infrared light emission close to monochromatic light : $\lambda_p = 950 \text{ nm}$ (typ.)
- Small ceramic package

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

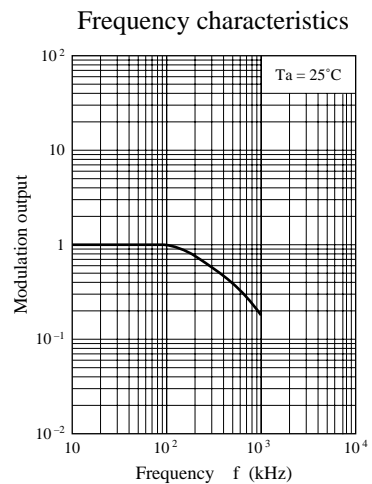
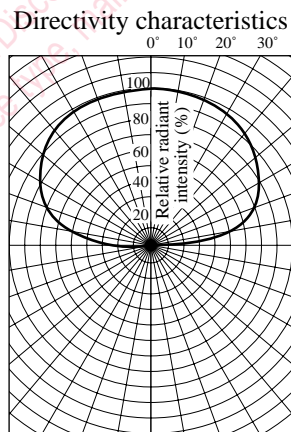
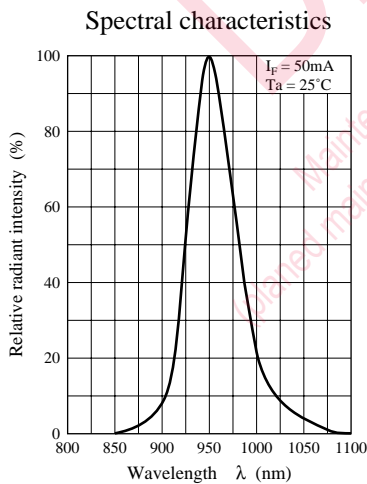
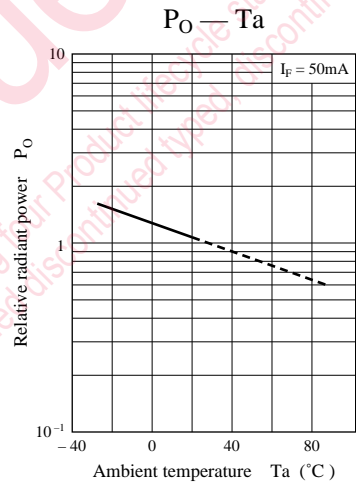
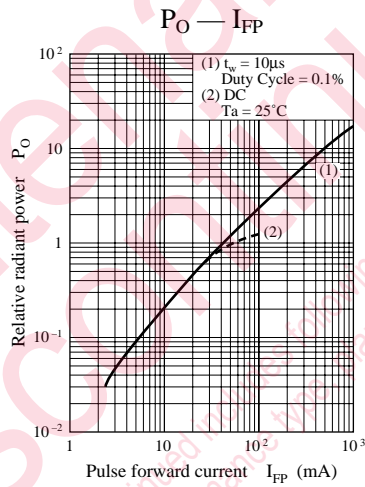
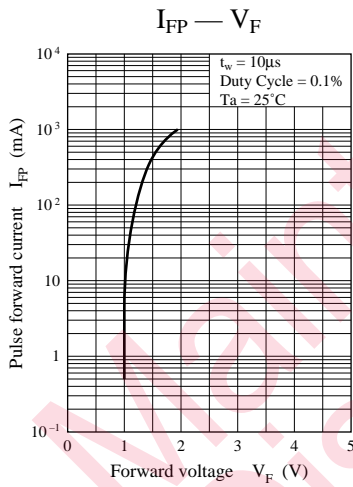
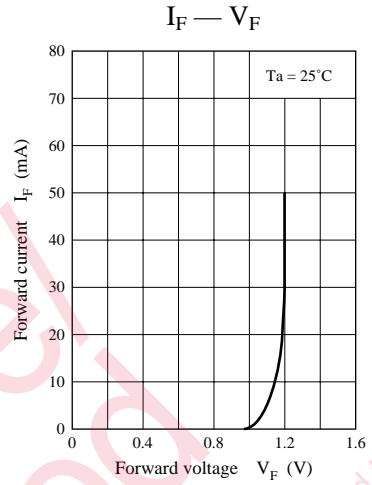
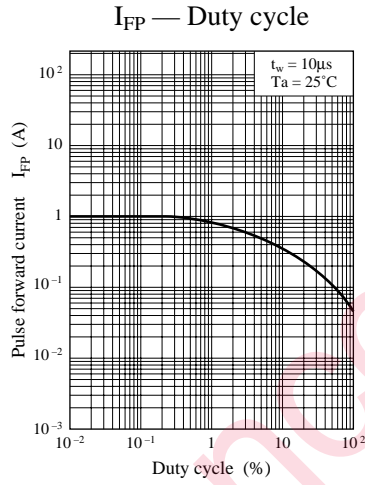
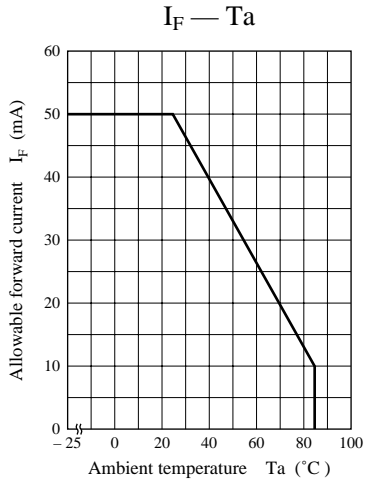
Parameter	Symbol	Rated	Unit
Power dissipation	P_D	75	mW
Forward current (DC)	I_F	50	mA
Pulse forward current	I_{FP}^*	1	A
Reverse voltage (DC)	V_R	3	V
Operating ambient temperature	T_{opr}	-25 to +85	$^\circ\text{C}$
Storage temperature	T_{stg}	-30 to +100	$^\circ\text{C}$

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



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

Parameter	Symbol	Conditions	min	typ	max	Unit
Radiant power	P_O	$I_F = 50 \text{ mA}$	1.5	3.5		mW
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	$I_F = 50 \text{ mA}$		1.2	1.5	V
Reverse current (DC)	I_R	$V_R = 3 \text{ V}$			10	μA
Capacitance between pins	C_t	$V_R = 0 \text{ V}$, $f = 1 \text{ MHz}$		50		pF
Half-power angle	θ	The angle in which radiant intensity is 50%		80		deg.



Caution for Safety

 **DANGER**

■ This product contains Gallium Arsenide (GaAs).

GaAs powder and vapor are hazardous to human health if inhaled or ingested. Do not burn, destroy, cut, cleave off, or chemically dissolve the product. Follow related laws and ordinances for disposal. The product should be excluded from general industrial waste or household garbage.

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