### LN55 GaAs Infrared Light Emitting Diode

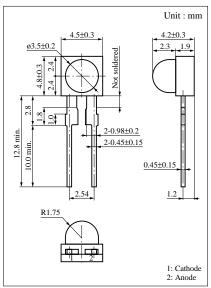
#### For optical control systems

#### Features

- High-power output, high-efficiency :  $P_0 = 3.5 \text{ mW}$  (typ.)
- Suited for use with silicon photodetectors
- Infrared light emission close to monochromatic light :  $\lambda_P = 950$  nm (typ.)
- High-speed modulation capability

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

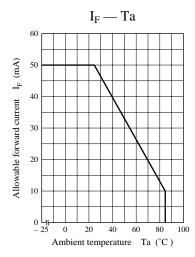
Parameter	Symbol	Ratings	Unit	
Power dissipation	P <sub>D</sub>	75	mW	
Forward current (DC)	I <sub>F</sub>	I <sub>F</sub> 50		
Pulse forward current	$I_{FP}^{*}$	1	А	
Reverse voltage (DC)	V <sub>R</sub>	3	V	
Operating ambient temperature	T <sub>opr</sub>	-25 to +85	°C	
Storage temperature	T <sub>stg</sub>	-30 to +100	°C	

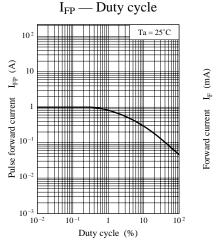


\* f = 100 Hz, Duty cycle = 0.1 %

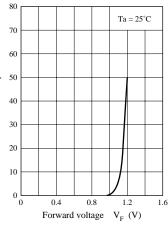
#### Electro-Optical Characteristics ( $Ta = 25^{\circ}C$ )

Parameter	Symbol	Conditions	min	typ	max	Unit
Radiant power	Po	$I_F = 50 mA$	1.8	3.5		mW
Peak emission wavelength	$\lambda_{P}$	$I_F = 50 mA$		950		nm
Spectral half band width	Δλ	$I_F = 50 mA$		50		nm
Forward voltage (DC)	V <sub>F</sub>	$I_F = 50 mA$			1.5	V
Reverse current (DC)	I <sub>R</sub>	$V_R = 3V$			10	μA
Capacitance between pins	Ct	$V_R = 0V$ , $f = 1MHz$		50		pF
Half-power angle	θ	The angle in which radiant intencity is 50%		35		deg.

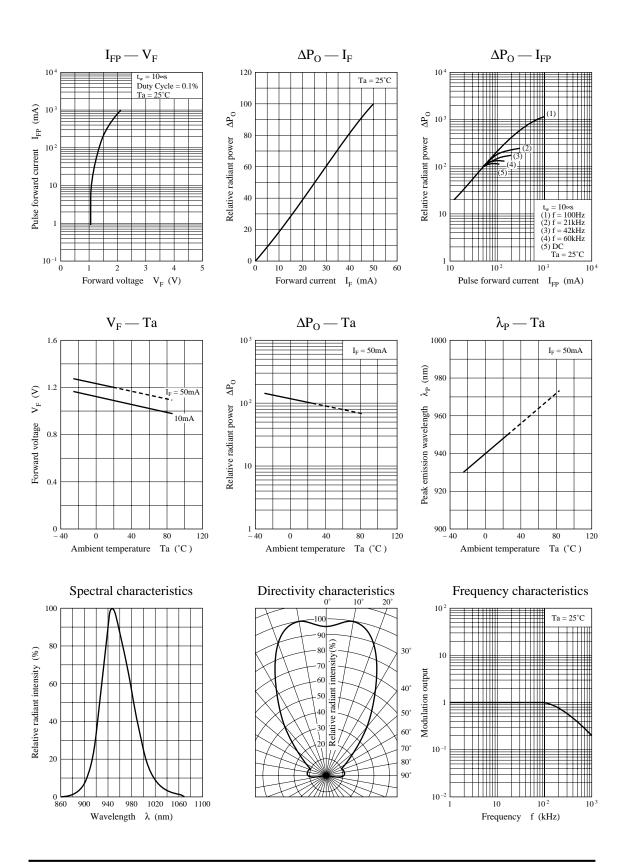








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# ▲ Caution for Safety



## Gallium arsenide material (GaAs) is used in this product.

Therefore, do not burn, destroy, cut, crush, or chemically decompose the product, since gallium arsenide material in powder or vapor form is harmful to human health.

Observe the relevant laws and regulations when disposing of the products. Do not mix them with ordinary industrial waste or household refuse when disposing of GaAs-containing products.

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