LNA4801L

GaAlAs Infrared Light Emitting Diode

For optical control systems

■ Features

- Fast response and high-speed modulation capability: $f_C = 20 \text{ MHz}$ (typ.)
- Wide directivity: $\theta = 22^{\circ}$ (typ.)
- Transparent epoxy resin package

■ Absolute Maximum Ratings $T_a = 25$ °C

Parameter	Symbol	Rating	Unit	
Power dissipation	P_{D}	190	mW	
Forward current	I_{F}	100	mA	
Pulse forward current *	I_{FP}	1	A	
Reverse voltage	V _R	3	V	
Operating ambient temperature	T _{opr}	-25 to +85	°C	
Storage temperature	T _{stg}	-30 to +100	°C	

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

■ Electrical-Optical Characteristics $T_a = 25$ °C±3°C

Parameter	Symbol	Conditions	Min	Тур	Max	Unit
Reverse current	I_R	$V_R = 3 V$		100	10	μΑ
Forward voltage	V_{F}	$I_F = 100 \text{ mA}$		1.6	1.9	V
Center radiant intensity	$I_{\rm e}$	$I_F = 50 \text{ mA}$	12		48	mW/sr
Peak emission wavelength *	$\lambda_{ m P}$	$I_F = 50 \text{ mA}$		860		nm
Spectral half band width *	Δλ	$I_F = 50 \text{ mA}$	W. O.	40		nm
Half-power angle	θ	The angle when the radiant power is halved.	6	22		0

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

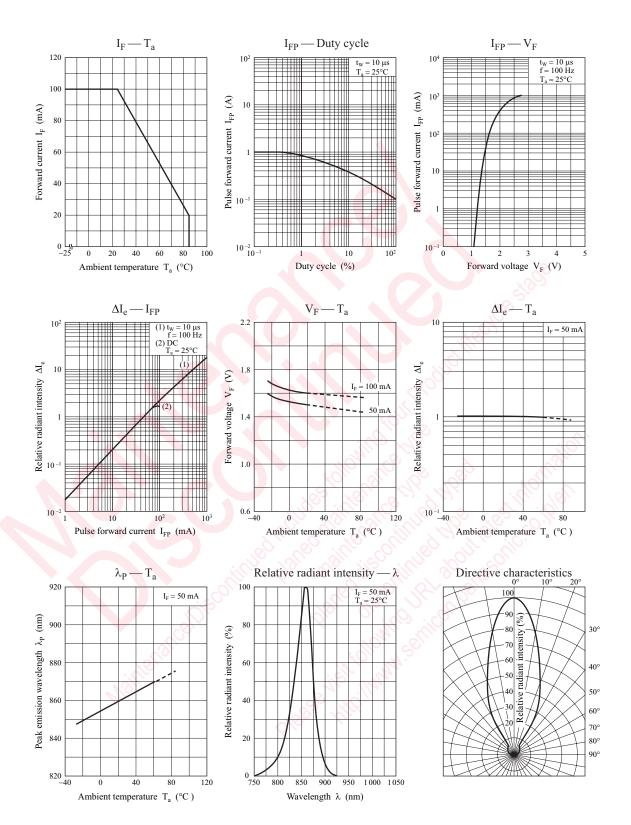
2. Cutoff frequency: 20 MHz

$$f_C: 10 \times \log \frac{P_O \text{ at } f = f_C}{P_O \text{ at } f = 1 \text{ MHz}} = -3$$

3. *: LED might radiate red light under large current drive.

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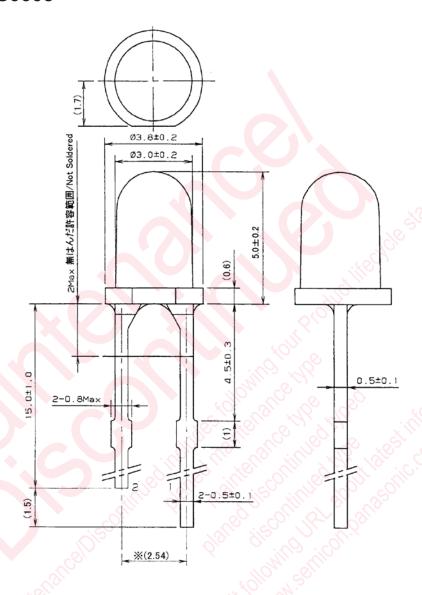


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■ Package (Unit: mm)

LEXLTN2S0003



- Pin name
 - 1: Anode
 - 2: Cathode

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