LNA4501F (LN124W)

GaAlAs Red Light Emitting Diode

For optical fiber communications and control systems

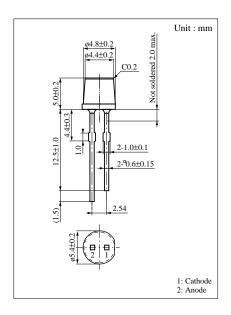
Features

- \bullet Red light emission close to monochromatic light : $\lambda_P = 680 \ nm$
- High-power output, high-efficiency : $P_0 = 3 \text{ mW}$
- High coupling characteristics and suits to a plastic fiber
- High-speed response: -3dB modulation of 10 MHz
- Flat resin package: ø 4.8 mm

■ Absolute Maximum Ratings (Ta = 25°C)

Parameter	Symbol	Ratings	Unit	
Power dissipation	P_{D}	120	mW	
Forward current (DC)	I_{F}	40	mA	
Pulse forward current	${ m I_{FP}}^*$	200	mA	
Reverse voltage (DC)	V _R	3	V	
Operating ambient temperature	T _{opr}	-25 to +85	°C	
Storage temperature	T _{stg}	-30 to +100	°C	

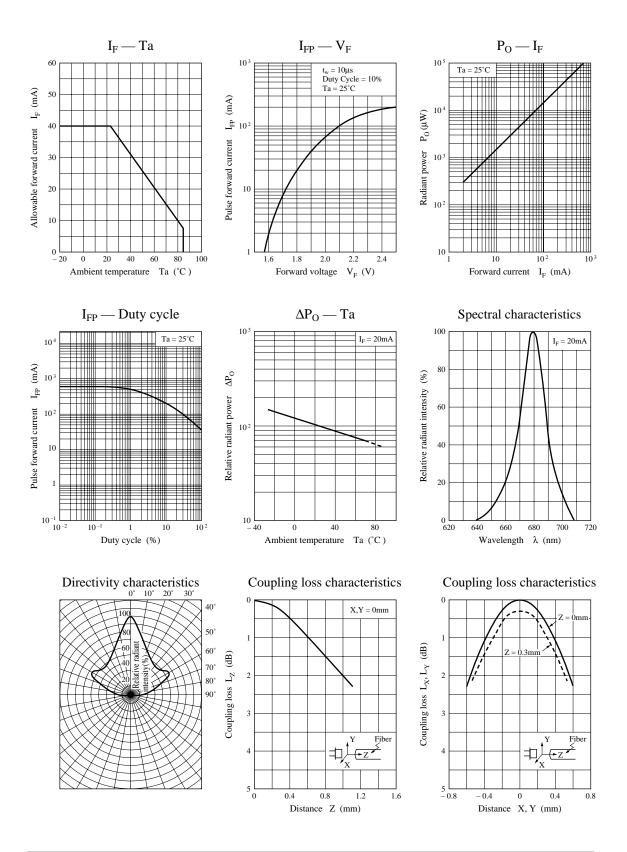
 $^{^*}$ $t_w = 10 \,\mu s$, Duty cycle = 10 %



\blacksquare Electro-Optical Characteristics (Ta = 25°C)

Parameter	Symbol	Conditions	min	typ	max	Unit
Radiant power	Po	$I_F = 20mA$	1	3		mW
Peak emission wavelength	λ_{P}	$I_F = 20 \text{mA}$		680		nm
Spectral half band width	Δλ	$I_F = 20 \text{mA}$		20		nm
Forward voltage (DC)	V_{F}	$I_F = 20mA$		1.8	2.6	V
Reverse current (DC)	I_R	$V_R = 3V$			100	μA
Response time	t _r , t _f	$I_{FP} = 100 \text{mA}$		30		ns
Half-power angle	θ	The angle in which radiant intencity is 50%		30		deg.

Note: Before using this product, be sure provide and/or receive approvals regarding individual specifications.



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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