

LN124D

GaAlAs Red Light Emitting Diode

For Optical Fiber Communications and Control Systems

■ Features

- Red radiation: $\lambda_p=660\text{nm}$
- High-power output
- High coupling characteristics used with plastic fiber
- High-speed modulation (10MHz)
- Plastic flat package: $\phi 4.8$

■ Absolute Maximum Ratings (Ta=25°C)

Item	Symbol	Value	Unit
Power Dissipation	P_D	120	mW
Forward Current (DC)	I_F	40	mA
Pulse Forward Current	I_{FP}^*	200	mA
Reverse Voltage (DC)	V_R	3	V
Operating Ambient Temperature	T_{opr}	-25~+85	°C
Storage Temperature	T_{stg}	-30~+100	°C

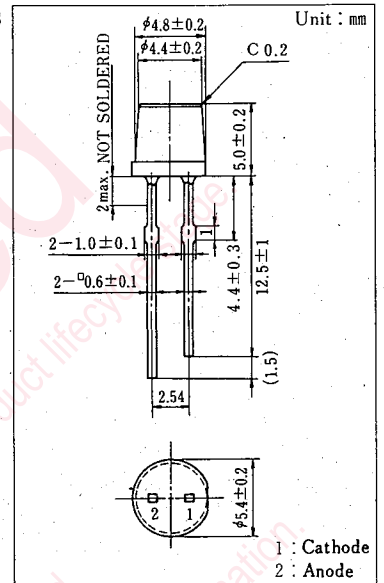
* $t_w=10\mu\text{s}$ Duty Cycle=10%

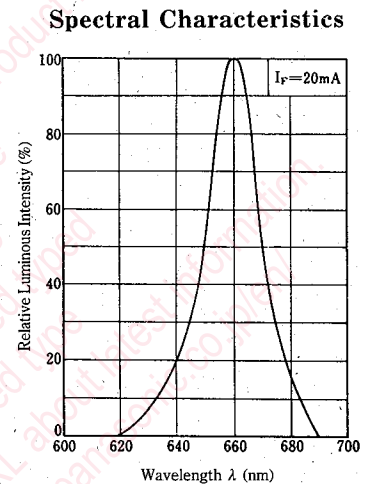
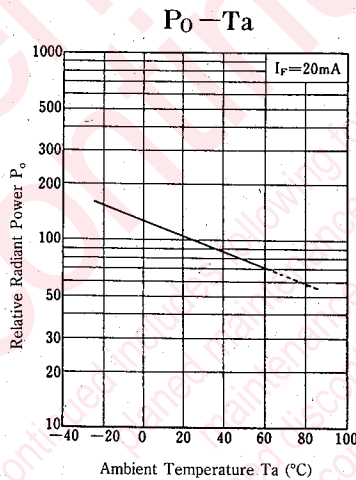
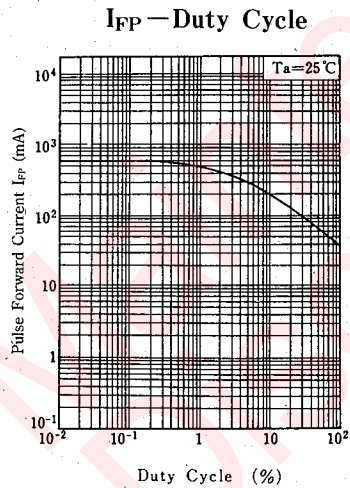
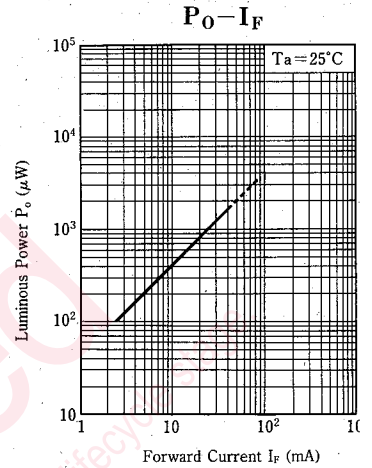
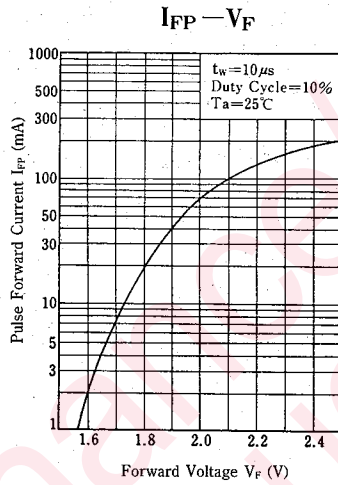
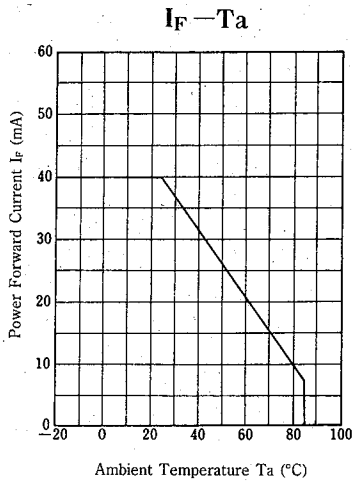
■ Electro-Optical Characteristics (Ta=25°C)

Item	Symbol	Condition	min.	typ.	max.	Unit
Optical Power Output	P_o^*	$I_F=20\text{mA}$	400			μW
Peak Emission Wavelength	λ_p	$I_F=20\text{mA}$		660		nm
Spectral Band Width	$\Delta\lambda$	$I_F=20\text{mA}$		20		nm
Forward Voltage (DC)	V_F	$I_F=20\text{mA}$		1.8	2.6	V
Reverse Current (DC)	I_R	$V_R=3\text{V}$			100	μA
Beam Half Angle	θ	Measured from the optical axis to the half power point		30		deg.
Response Time	t_r, t_f	$I_{FP}=100\text{mA}$		30		ns

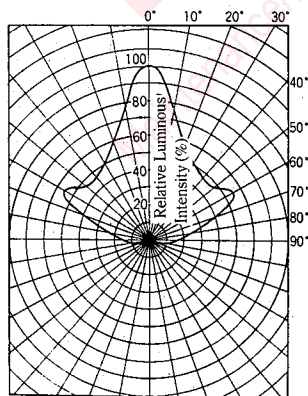
* P_o Classifications

Class	R	S	T
P_o (μW)	400~900	700~1200	>1000

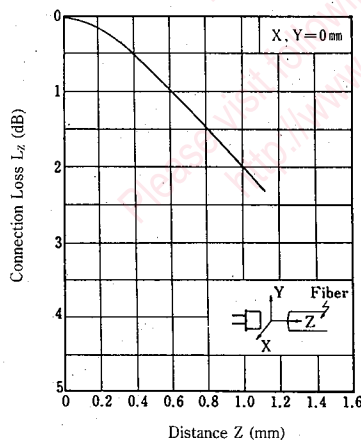




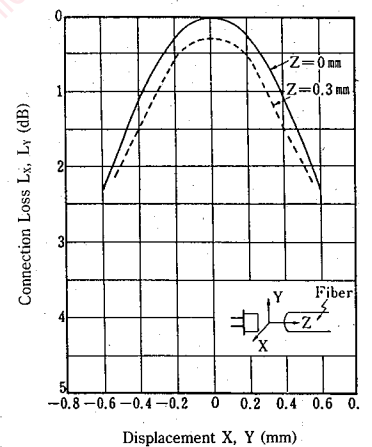
Directional Characteristics



Coupling Loss Characteristics



Coupling Loss Characteristics



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