LN66

GaAs Infrared Light Emitting Diode

For optical control systems

Features

- High-power output, high-efficiency : $P_O = 8 \text{ mW (typ.)}$
- Emitted light spectrum suited for silicon photodetectors
- Good radiant power output linearity with respect to input current
- Wide directivity : $\theta = 25 \text{ deg. (typ.)}$
- Transparent epoxy resin package

■ Absolute Maximum Ratings (Ta = 25°C)

Symbol	Ratings	Unit
P_{D}	160	mW
I_F	100	mA
I_{FP}^*	1.5	Α
V_R	3	V
T_{opr}	-25 to +85	°CO°
T_{stg}	-40 to +100	°C
	P_{D} I_{F} I_{FP}^{*} V_{R} T_{opr}	$\begin{array}{ccc} P_{D} & 160 \\ I_{F} & 100 \\ I_{FP}^{*} & 1.5 \\ V_{R} & 3 \\ T_{opr} & -25 \text{ to } +85 \\ \end{array}$

^{*} f = 100 Hz, Duty cycle = 0.1 %

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

Parameter	Symbol	Conditions	min	typ	max	Unit
Radiant power	P_{O}^{*}	$I_F = 50 \text{mA}$	5	8		mW
Peak emission wavelength	$\lambda_{ m P}$	$I_F = 50 \text{mA}$		950		nm
Spectral half band width	Δλ	$I_F = 50 \text{mA}$		50		nm
Forward voltage (DC)	V_F	$I_F = 100 \text{mA}$		1.3	1.6	V
Reverse current (DC)	I_R	$V_R = 3V$			10	μΑ
Capacitance between pins	Ct	$V_R = 0V$, $f = 1MHz$		35		pF
Half-power angle	θ	The angle in which radiant intencity is 50%		25		deg.

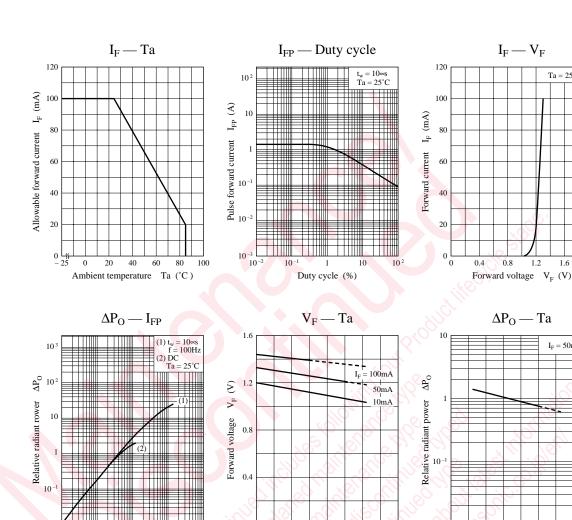
* Po Classifications

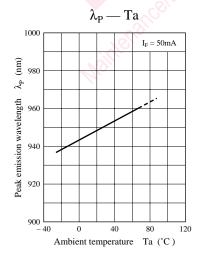
Class	R	S
$P_{O}(mW)$	5 to 8	>7

 $Ta = 25^{\circ}C$

2.0

 $I_F = 50 \text{mA}$

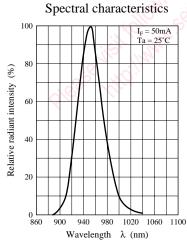




10²

Pulse forward current I_{FP} (mA)

103

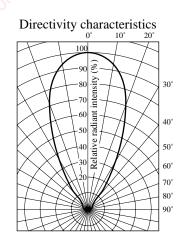


0

Ambient temperature

40

Ta (°C)



40

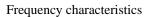
Ambient temperature Ta (°C)

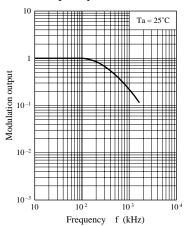
80

120

- 40

0







■ 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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