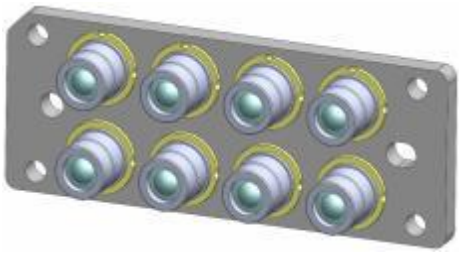
NICHIA

Green Laser Diode Bank

NUGM06T

Features



- High Power Multiple Laser Diode (LD) Bank
- 8 Collimator Beams
- No Outgas
- High Heat Dissipation
- High safety structure for prevention of removing LDs

Standard Operating Conditions

- Forward Current: 1 . 9 A(CW Operation)
- T_m=6 5 °C, ACC(Auto Current Control) Operation

Absolute Maximum Ratings

Item	Symbol	Absolute Maximum Ratings	Unit
Forward Current	I_F	2.3 [1]	A
Allowable Reverse Current	I_R(LD)	85 [1]	mA
Storage Temperature	T_{stg}	-40 ~ 85	°C
Operating Temperature	T_m	0 ~ 65	°C

[1] Individual LD

Initial Electrical/Optical Characteristics of LD Bank

(T_m=22°C)

Item	Condition	Symbol	Min	Typ.	Max	Unit
Optical Output Power	I_F=1.9A	P_o	11.7	(13.2)	-	W
Dominant Wavelength	I_F=1.9A	λ_d	520	(525)	530	nm
Forward Voltage [2]	I_F=1.9A	V_F	31	(35)	40	V
Beam Pointing Tilt Angle [3]	I_F=1.9A	$\Delta\theta$	-	-	0.7	°

[2] 8LDs series connection

[3] Beam Pointing Tilt Angle $\Delta\theta = \sqrt{\Delta\theta_{//}{}^2 + \Delta\theta_{\perp}{}^2}$ (Individual LD)

Initial Electrical/Optical Characteristics of mounted LD

(T_c=25°C)

Item		Condition	Symbol	Min	Typ.	Max	Unit
Optical Output Power		I_F=1.9A	P_o	-	(1.65)	-	W
Dominant Wavelength		I_F=1.9A	λ_d	518	(525)	532	nm
Threshold Current		CW	I_{th}	150	-	500	mA
Slope Efficiency		CW	η	-	(1. 1)	-	W/ A
Forward Voltage		I_F=1.9A	V_F	4.0	-	5.5	V
Beam Divergence [4]	Parallel	I_F=1.9A	$\theta_{//}$	0.2	(0.4)	0.6	°
	Perpendicular		$\theta_{\perp}$	-1.0	(0)	1.0	

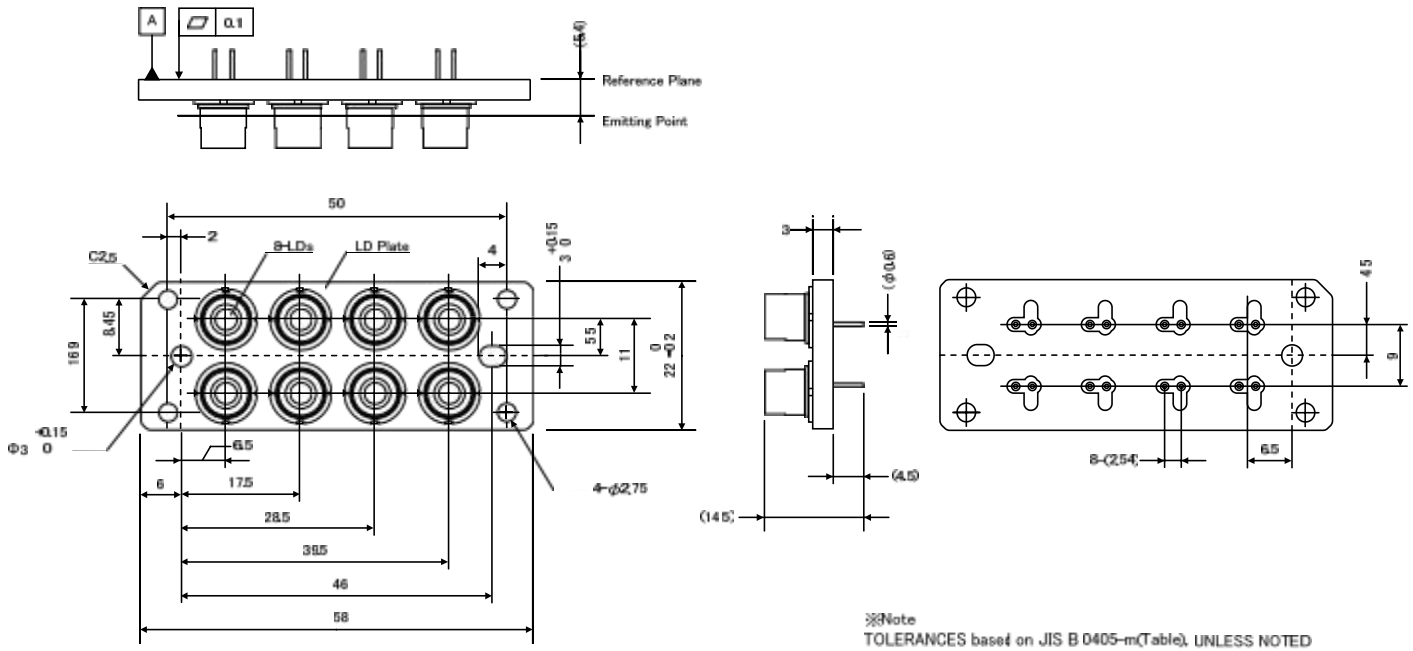
[4] Full angle at 1/ e^2 from peak intensity

( ) are reference figures.

All figures in this specification are measured by Nichia' s method and may contain measurement deviations.

This model is Test Sample for evaluation or design purpose only. Life time is not guaranteed.
The above specifications are for reference purpose only and subjected to change without prior notice.

Outline Dimensions



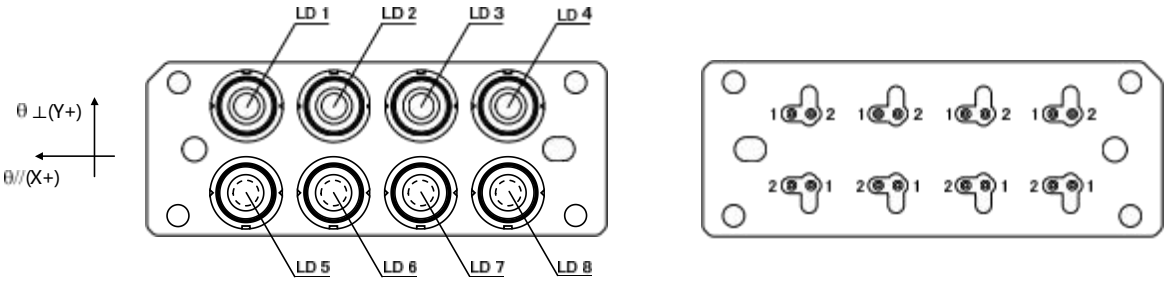
※Note
TOLERANCES based on JIS B 0405-m(Table), UNLESS NOTED

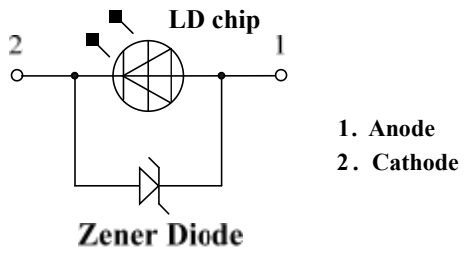
Table, Limits for Linear measures(mm)

Range	0.5 to 3	above 3 to 6	above 6 to 30	above 30 to 120
Tolerance	±0.1	±0.1	±0.2	±0.3

Dimensions are in millimeters
Figures in ( ) are reference purpose only.

LD Position No. & Pin Connection





1. Anode
2. Cathode

This model does not have a Photo Diode.
This model has a Zener Diode built in as a protection circuit against static electricity.