



30mW 505nm Laser Diode

GLD-505-30

Absolute maximum ratings

Parameter	Symbol	Values		Unit
		min.	max.	
Operating Current	I_f		130	mA
Operating Temperature	T_{case}	-10	+60	°C
Storage Temperature	T_{sta}	-40	+85	°C
Reverse Voltage	V_R	-	2	V
Soldering Temperature max. 10 sec.	T_{solder}	-	260	°C
Junction Temperature	T_j	-	120	°C

- Single mode
- CW and pulsed operation
- Miniaturized
- isolated against package
- T056

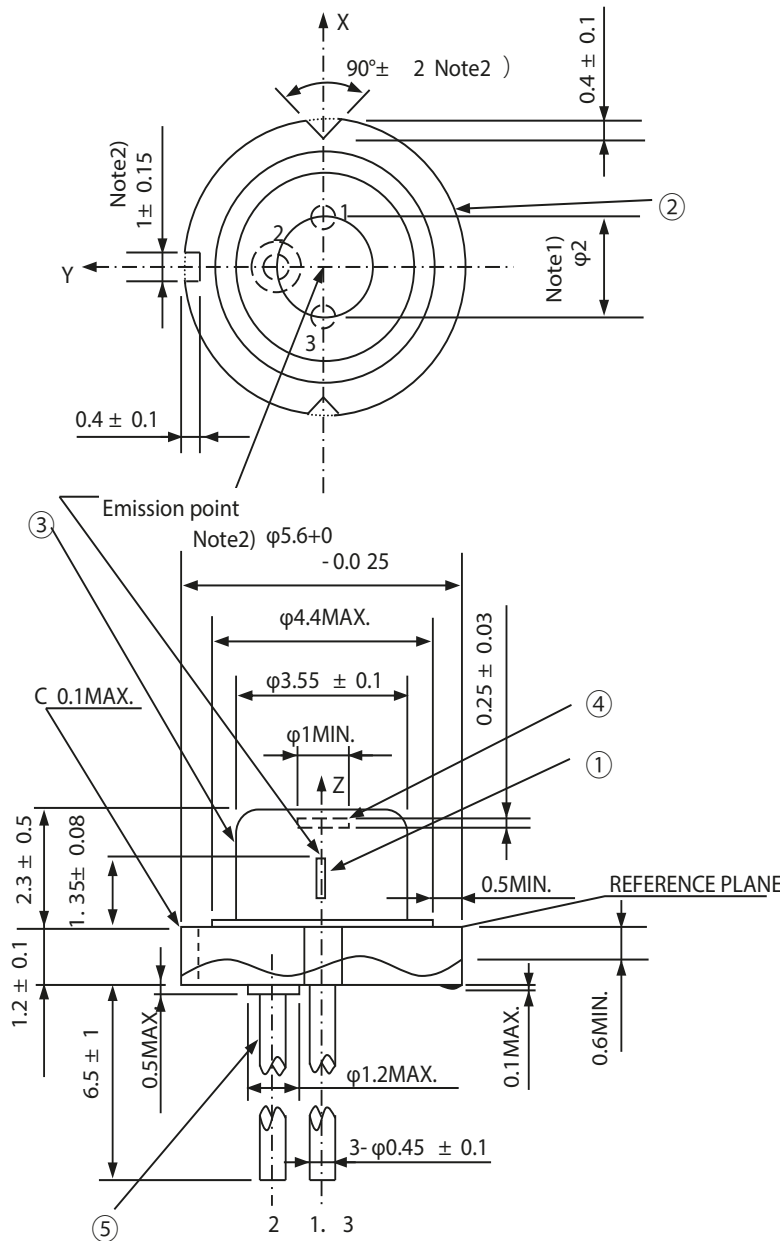
Laser Characteristics

Parameter	Symbol	Values			Unit
		min.	typ.	max.	
Emission Wavelength	λ_{peak}	500	505	510	nm
Output Power	P_{out}	-	30	-	mW
Spectral Width (FWHM)	$\Delta\lambda$	-	2	-	nm
Threshold Current	I_{th}	-	70	-	mA
Operating Current	I_F	-	125	-	mA
Operating Voltage	V_F	-	6.0	-	V
Beam Divergence (FWHM)	$\theta_H \times \theta_T$	-	8.5 x 23	-	deg
Emission Point Accuracy	-	-3	-	3	
Differential Efficiency	nd	-	0.5	-	mW/mA
Thermal resistance (junction to case)	R_{th}	-	38	-	K/W



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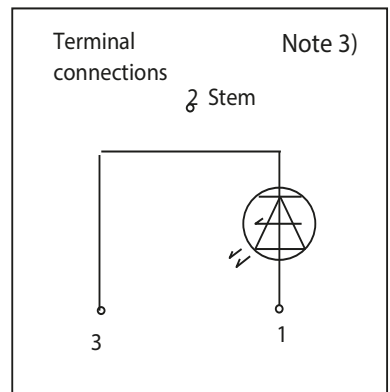
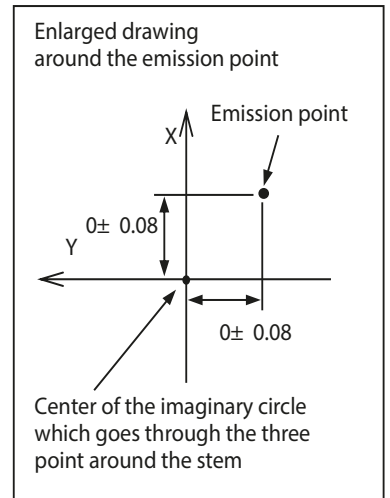
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Note 1) Dimension of the bottom of leads.

Note 2) These dimensions are valid only in the range of 0 ~ 0.6mm below from the reference plane.

Note 3) Please don't connect the lead pin No.2 to the driving circuit.



Mass of the product :
0.31g (reference value)

Marking
Position : TBD
Printed contents : TBD

GENERAL TOLERANCES ± 0. 2
UNIT:mm

No.	Component	Material	Finish
①	Laser Diode Chip	InAlGaN	-
②	Stem	Fe/Cu	Gold-plated
③	Cap	45Alloy	Nickel+Pd plated
④	Window glass	Borosilicated glass	-
⑤	Lead pins	Kovar	Gold-plated