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RLT405500MG

- Violet Laser Diode
- 405 nm, 500 mW
- Multimode
- 5.6 mm TO-Can, Flat Window



Description

RLT405500MG is a **InAlGaN** based multimode Laser Diode emitting at typical 405 nm with rated output power of 500 mW CW at room temperature. The 5.6 mm TO package includes a cap and flat window. **RLT405500MG** comes **without monitor PD**.

Maximum Rating ($T_{CASE} = 25^{\circ}C$)

Parameter	Symbol	Values		Unit
		Min.	Max.	
Optical Output	P_O		500	mW
Reverse Voltage	V_R		2	V
Operating Temperature	T_{OPR}	- 10	+ 50	$^{\circ}C$
Storage Temperature	T_{STG}	- 40	+ 80	$^{\circ}C$
Soldering Temperature (max. 3s)	T_{SOL}		+ 260	$^{\circ}C$



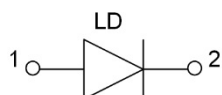
Electro-Optical Characteristics ($T_{CASE} = 25^{\circ}C, P_O = 500mW$)

Parameter	Symbol	Values			Unit	
		Min.	Typ.	Max.		
Peak Wavelength	λ_P	400	405	415	nm	
Operating Voltage	V_F	4.0	4.5	5.0	V	
Threshold Current	I_{th}	120	140	160	mA	
Operating Current	I_F	400	450	500	mA	
Slope Efficiency	η	1.5	1.7	1.9	mW/mA	
Beam Divergence (FWHM)	parallel	$\theta_{ }$	6	8	15	deg.
	perpendicular	θ_{\perp}	15	20	25	deg.
Deviation Angle	parallel	$\Delta\theta_{ }$	-3		3	deg.
	perpendicular	$\Delta\theta_{\perp}$	-3		3	deg.

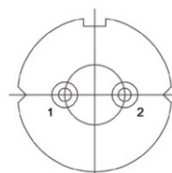
Electrical Connection

Pin Configuration

Pin #	Function
Pin 1	Anode
Pin 2	Cathode
/	/



Bottom View

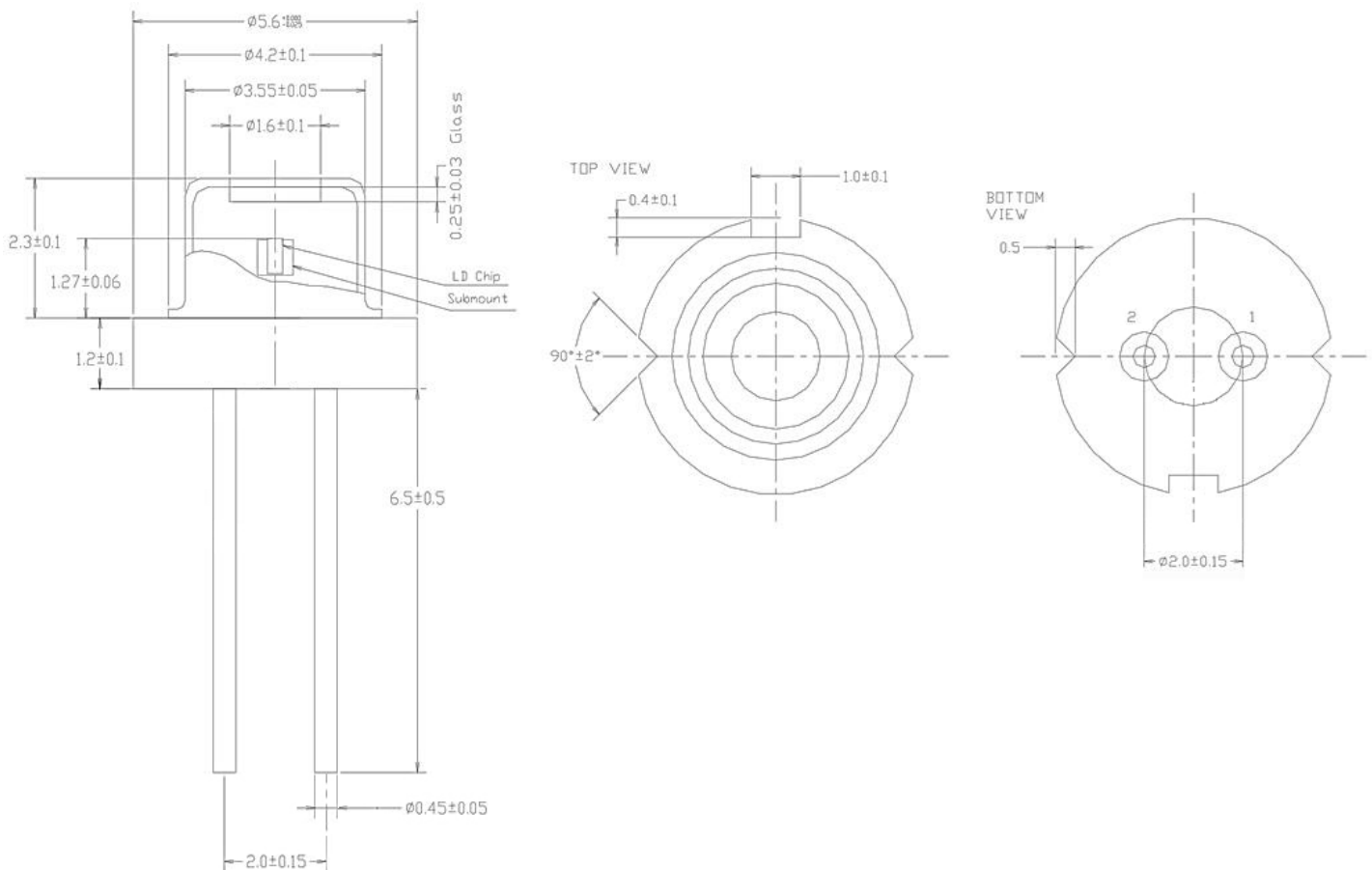




Material

Component	Material	Finish
LD chip	InAlGaN	/
Stem	Fe, Cu	Au-plated
Cap	Kovar	Ni-plated
Window glass	Borosilicated glass	/
Lead pins	Kovar	Au-plated

Outline Dimensions



All dimensions in mm