



## RLT395-300MGE

- UV High Power Laser Diode
- 395 nm, 300 mW
- Multi transverse mode
- 5.6 mm TO-Can, Flat Window



### Description

**RLT395-300MGE** is a ultra-violet high power laser diode, typically emitting at 395 nm. It features multi transverse mode emission and operating temperature range of 0 to 30°C. It is an efficient radiation source for many applications like laser projection, holography, metrology, or use in the biomedical field. **RLT395-300MGE** comes in 5.6 mm TO-Can package **without PD**.

### Maximum Rating\*

Parameter	Symbol	Values		Unit
		Min.	Max.	
Reverse Voltage	$V_R$		2	V
Operating Temperature*	$T_{OPR}$	- 0	+ 30	°C
Storage Temperature*	$T_{STG}$	- 40	+ 85	°C
Soldering Temperature (max. 3s)	$T_{SOL}$		+ 260	°C



\* operating close to or outside these conditions may damage the device

### Electro-Optical Characteristics ( $T_{CASE} = 25^\circ\text{C}$ )

Parameter	Symbol	Values			Unit
		Min.	Typ.	Max.	
<b>Peak Wavelength</b>	$\lambda_P$	<b>385</b>	<b>395</b>	<b>405</b>	<b>nm</b>
Spectral Width	$\lambda_\Delta$		2.0		<b>nm</b>
Optical Output Power	$P_O$		300		mW
Operating Voltage	$V_F$		4.8	5.5	V
Threshold Current	$I_{th}$		130	200	mA
Operating Current	$I_F$		330	360	mA
Slope Efficiency	$\eta$		1.6		W/A
Spatial Mode		Multi transverse mode			
Beam Divergence (FWHM)	parallel	$\Theta_{  }$	15	21	deg.
	perpendicular	$\Theta_{\perp}$	45	51	deg.

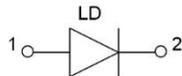




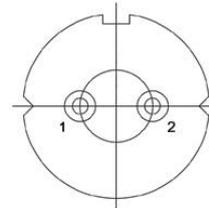
## Electrical Connection

### Pin Configuration (subject to change without notice)

Pin #	Function
Pin 1	LD Anode
Pin 2	LD Cathode

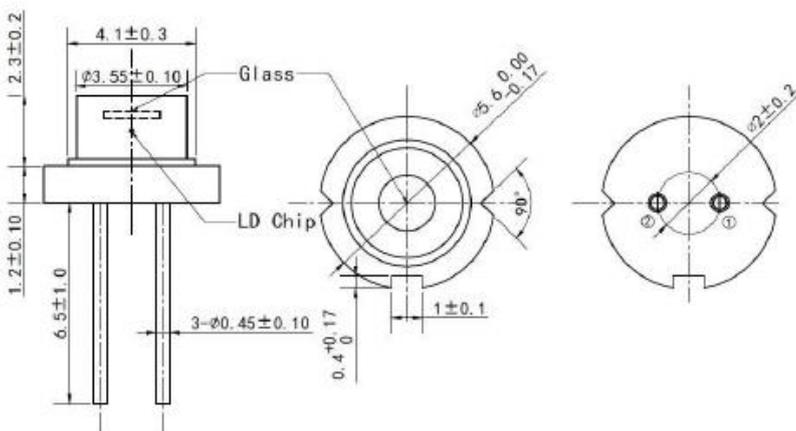


### Bottom View



## Outline Dimensions

### TO5



All dimensions in mm

## Precautions

### Safety

**Caution:** Laser light emitted from any laser diode may be **harmful to the human eye**. Avoid looking directly into the laser diode's aperture when the diode is in operation.

**Note:** The use of optical lenses with this laser diode will increase eye hazard

### ESD caution

Always do handle laser diodes with extreme care to **prevent electrostatic discharge**, the primary cause of unexpected diode failure. To prevent ESD related failures, it is strongly advised to always **wearing wrist straps**, and **grounding all applicable work surfaces**, when handling laser diodes

### Operating considerations

It is strongly advised to only operate this laser diode with a current source. The current of a laser diode is an exponential function of the voltage across it. **Usage of current regulated drive circuits is mandatory.** Laser diodes may be damaged by excessive drive currents or switching transients

**Proper heat sinking will greatly enhance stability and lifetime of the laser diode**