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RLT495-80MGE

- Cyan Laser Diode
- 495 nm, 80 mW
- Single Mode
- 5.6 mm TO Package, Flat Window



Description

RLT495-80MGE is a cyan laser diode, typically emitting at 495 nm. It features single mode emission and operating temperature range of up to 60°C. It is an efficient radiation source for many applications like laser projection, holography, metrology, or use in the biomedical field. **RLT4895-80MGE** 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	+ 60	°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.	
Peak Wavelength	λ_P	490	495	500	nm
Spectral Width	λ_Δ		2.0		nm
Optical Output Power	P_O		80		mW
Operating Voltage	V_F		6.5	8.0	V
Threshold Current	I_{th}		30	65	mA
Operating Current	I_F		130	150	mA
Beam Divergence (FWHM)	parallel		8	12	deg.
	perpendicular		24	26	deg.

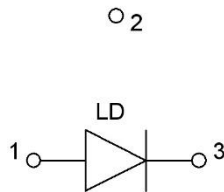




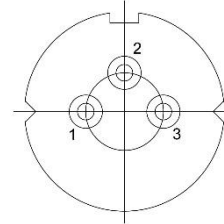
Electrical Connection

Pin Configuration

Pin #	Function
Pin 1	LD Anode
Pin 2	GND
Pin 3	LD Cathode

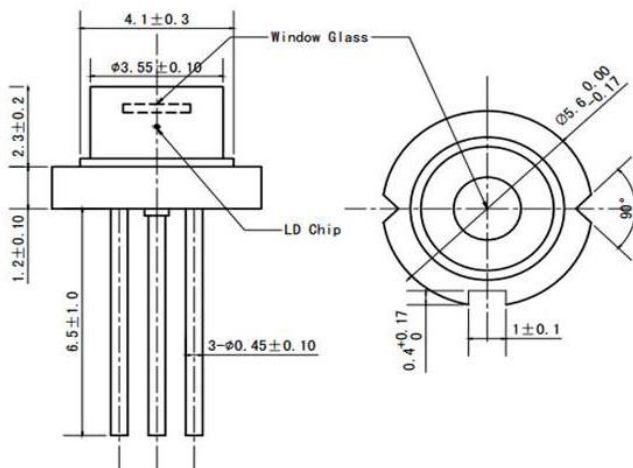


Bottom View



Outline Dimensions

5.6 mm TO-Can



All dimensions in mm

Precautions

Safety

Laser light emitted from any laser diode may be harmful to the human eye. **Avoid looking directly into the laser diode's aperture.** The use of optical lenses will increase eye hazard



ESD Caution

Always do handle laser diodes with care to **prevent electrostatic discharge.** We advise to **wearing wrist straps, and grounding all applicable work surfaces,** when handling laser diodes

Operating Considerations

Usage of current regulated drive circuits is mandatory We advise to operate this laser diode with a current source and heat sink, and to never exceed the maximum specifications as outlined in this datasheet.

