



# ROITHNER LASERTECHNIK GmbH

WIEDNER HAUPTSTRASSE 76  
TEL. +43 1 586 52 43 -O. FAX. -44

1040 VIENNA AUSTRIA  
OFFICE@ROITHNER-LASER.COM



## RLT488-80MGE

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



### Description

**RLT488-80MGE** is a cyan laser diode, typically emitting at 488 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. **RLT488-80MGE** 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*	$T_{OPR}$	- 10	+ 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	$\lambda_P$	478	488	498	nm
Spectral Width	$\lambda_\Delta$		2.0		nm
Optical Output Power	$P_O$		60		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.

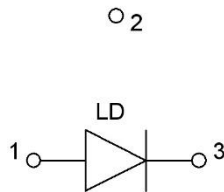




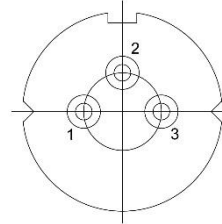
## Electrical Connection

### Pin Configuration

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

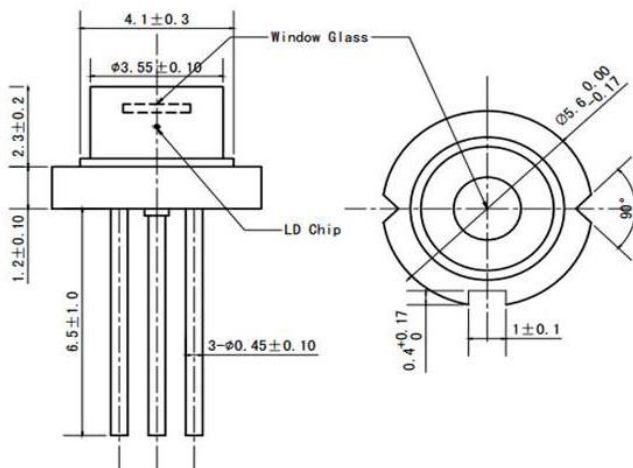


### Bottom View



## 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.

