



ROITHNER LASERTECHNIK GmbH

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

1040 VIENNA AUSTRIA
OFFICE@ROITHNER-LASER.COM



RLT635-30MGS

- Red Laser Diode
- 638 nm, 30 mW
- Single transverse mode
- TO18 package, Flat Window



Description

RLT635-30MGS is a red laser diode, typically emitting at 635 nm. It features **single transverse mode** emission and low operating current. **RLT635-30MGS** comes in 5.6 mm TO-Can package **with integrated PD**.

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

Parameter	Symbol	Values		Unit
		Min.	Max.	
Reverse Voltage	U_R		2	V
Operating Temperature*	T_{OPR}	- 10	+ 50	$^{\circ}C$
Storage Temperature*	T_{STG}	- 40	+ 85	$^{\circ}C$
Soldering Temperature (max. 3s)	T_{SOL}		+ 260	$^{\circ}C$

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

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

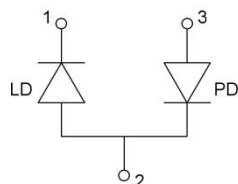
Parameter	Symbol	Values			Unit	
		Min.	Typ.	Max.		
Peak Wavelength	λ_P	628	638	648	nm	
Optical Output Power	P_O		30		mW	
Spectral Width (FWHM)	λ		2.0		nm	
Operating Voltage	U_F		2.4	2.7	V	
Threshold Current	I_{th}		40	65	mA	
Operating Current	I_F		75	85	mA	
PD Current	I_{PD}		0.2		mA	
PD Reverse Voltage	V_{PD}			30	V	
Beam Divergence (FWHM)	parallel	$\Theta_{ }$	6	10	15	deg.
	perpendicular	Θ_{\perp}	15	22	25	deg.



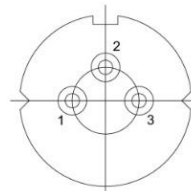
Electrical Connection

Pin Configuration

Pin #	Function
Pin 1	LD cathode
Pin 2	LD anode, PD cathode
Pin 3	PD anode

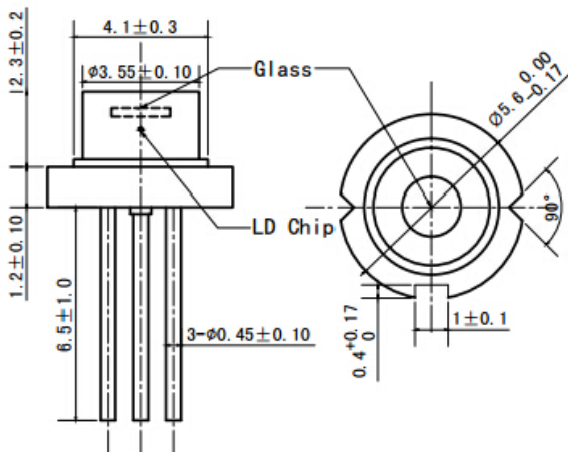


Bottom View





Outline Dimensions



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.

© All Rights Reserved

The above specifications are for reference purpose only and subjected to change without prior notice.