



## RLT1270-20MGS-B

- DFB Single Mode Laser Diode
- 1270 nm, 20 mW
- 5.6 mm TO-can
- Non-Spherical Lens



### Description

**RLT1270-20MGS-B** is an infrared **distributed feedback (DFB) single mode** laser diode, typically emitting at a wavelength of 1270 nm, with max. allowed operating temperature of 50°C. **RLT1270-20MGS-B** comes in 5.6 mm **4-pin TO-Can** package with **integrated monitor PD** and **non-spherical glass lens**. Peak wavelength selection, flat glass window, and different pin configuration are optionally available.

### Maximum Ratings\*

Parameter	Symbol	Values		Unit
		Min.	Max.	
Reverse Voltage	$U_R$		2	V
PD Reverse Voltage	$U_{RPD}$		15	V
Operating Temperature*	$T_{OPR}$	- 20	+ 50	°C
Storage Temperature*	$T_{STG}$	- 40	+ 85	°C
Soldering Temperature (3 s)	$T_{SOL}$		+ 260	°C

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

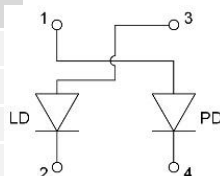
### Electro-Optical Characteristics ( $T_{CASE} = 25^\circ\text{C}$ )

Parameter	Symbol	Values			Unit
		Min.	Typ.	Max.	
<b>Peak Wavelength</b>	$\lambda_P$	<b>1260</b>	<b>1270</b>	<b>1280</b>	<b>nm</b>
Spectral Width	$\lambda_\Delta$		0.3	2.0	nm
Optical Output Power	$P_O$		20		mW
Operating Voltage	$U_F$		1.4	1.7	V
Threshold Current	$I_{th}$		5	15	mA
Operating Current	$I_F$		85	100	mA
Monitor Reverse Current	$I_{MR}$		0.5		mA

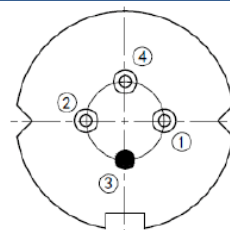


### Electrical Connection

Pin Configuration	
Pin #	Function
Pin 1	PD Anode
Pin 2	LD Cathode
Pin 3 [case]	LD Anode
Pin 4	PD cathode



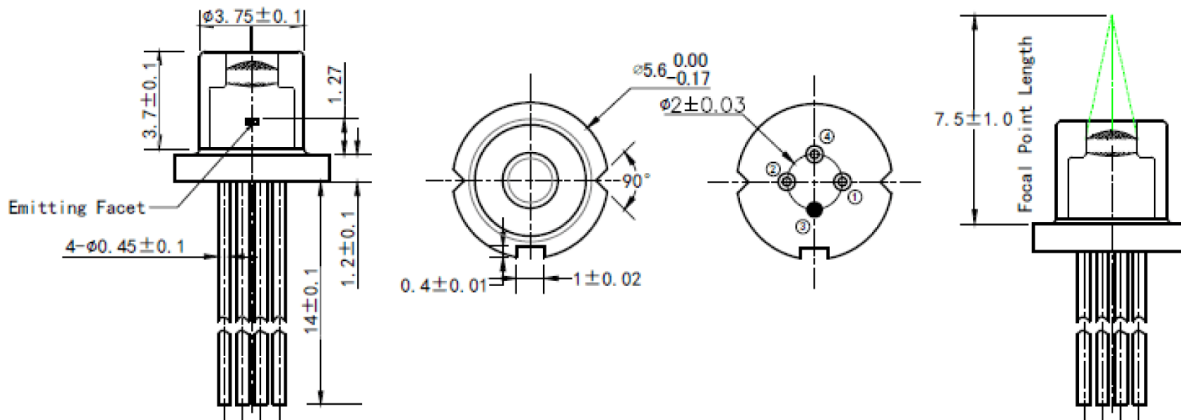
### Bottom View





## Outline Dimensions

### 5.6 mm TO-Can with non-spherical lens



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, we do advise to always **wearing wrist straps**, and **grounding all applicable work surfaces**, when handling laser diodes

### Operating considerations

We do advise to operate this laser diode with a current source only. 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**

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