



RLT635-100G



TECHNICAL DATA

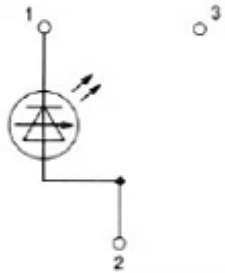
High Power Visible Laser Diode

Emitting Aperature: $1 \times 100 \mu\text{m}^2$
 Lasing wavelength: 635 nm, typ.
 Max. optical power: 100 mW
 Package: 9 mm

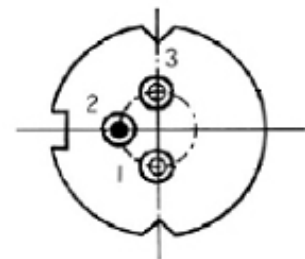
NOTE!
LASERDIODE
MUST BE COOLED!

ATTENTION
 OBSERVE PRECAUTIONS
 FOR HANDLING
 ELECTROSTATIC SENSITIVE DEVICE

PIN CONNECTION:



- 1) Laserdiode cathode
- 2) Laserdiode anode
- 3) n.c.



Absolute Maximum Ratings (Tc = 25°C)

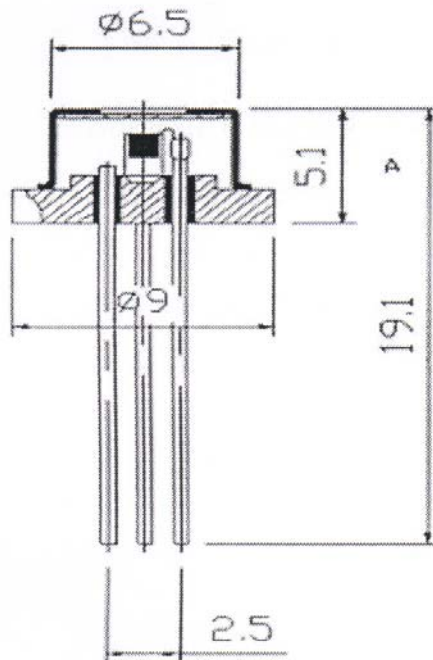
CHARACTERISTIC	SYMBOL	RATING	UNIT
Optical Output Power	P_o	100	mW
LD Reverse Voltage	$V_{R(LD)}$	-	V
PD Reverse Voltage	$V_{R(PD)}$	-	V
Operating Temperature	T_{op}	0 .. +25	°C
Storage Temperature	T_{stg}	-10 .. +60	°C

Optical-Electrical Characteristics (Tc = 25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Optical Output Power	P_o	cw	-	100	-	mW
Threshold Current	I_{th}	cw	-	-	500	mA
Operation Current	I_{op}	$P_o = 100 \text{ mW}$	-	-	700	mA
Operation Voltage	V_{op}	$P_o = 100 \text{ mW}$	-	-	2.5	V
Slope Efficiency			0.5	-	-	W/A
Lasing Wavelength	λ_p	$P_o = 100 \text{ mW}$	625	635	645	nm
Spectral Wavelength	$\Delta\lambda$	$P_o = 100 \text{ mW}$			3	nm
Beam Divergence	$\Theta_{//}$	$P_o = 100 \text{ mW}$		10		°
Beam Divergence	Θ	$P_o = 100 \text{ mW}$		40		°
Polarization				TE		
Wavelength Temp. Coefficient		$P_o = 100 \text{ mW}$	-	0.3	-	nm/°C



PACKAGE DIMENSIONS:



Operation Notes:

- 1.) Be sure that the operating current is not exceed the specified operating current, or else which will accelerate aging, shorten lifetime or even damage devices.
- 2.) Increase the current gradually to the specified operating value. For shutting down the laser diode, please decrease the current to zero gradually, and then turn off the power. Pleaser sure that the power supply have no current overshoot at any time. The current overshoot can damage the laser diodes.
- 3.) The 635nm high power laser diode is sensitive to the work tempeareture. The work temperature should be no more than 25°C. It is better if the temperature of the heat sink can be keep at 20°C. We advise that the TEC can be used for keep the temperature of the heat sink at 20°C.
- 4.) Be careful to keep the facet cleaning. Contamination of facet will result in rapid degradation of devices.
- 5.) The 635nm high power laser diode is very sensitive to static. Please caution about static during operating with the laser diode.
- 6.) Caution! Don't look at the laser light directly, because it's harmful to eyes.
- 7.) A clean, dry and ventilated environment should be available when storing and operation. Dew can damage the laser diodes.
- 8.) The storage temperature is between -10 and 70°C.