



RLT1500-30G



TECHNICAL DATA

Sample Nr. 26-1439

Infrared Laser Diode

Features

- Lasing Mode Structure: Single mode
- Peak Wavelength : typ. 1500 nm
- Optical Output Power: 30 mW
- Package: 9 mm



Electrical Connection

Pin Configuration	Bottom View								
<div style="display: inline-block; vertical-align: top; margin-left: 20px;"> <p><i>n-type</i></p> <table border="1"> <thead> <tr> <th>PIN</th> <th>Function</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>LD Cathode</td> </tr> <tr> <td>2</td> <td>LD Anode, PD Cathode</td> </tr> <tr> <td>3</td> <td>PD Anode</td> </tr> </tbody> </table> </div>	PIN	Function	1	LD Cathode	2	LD Anode, PD Cathode	3	PD Anode	
PIN	Function								
1	LD Cathode								
2	LD Anode, PD Cathode								
3	PD Anode								

Typical Characteristics

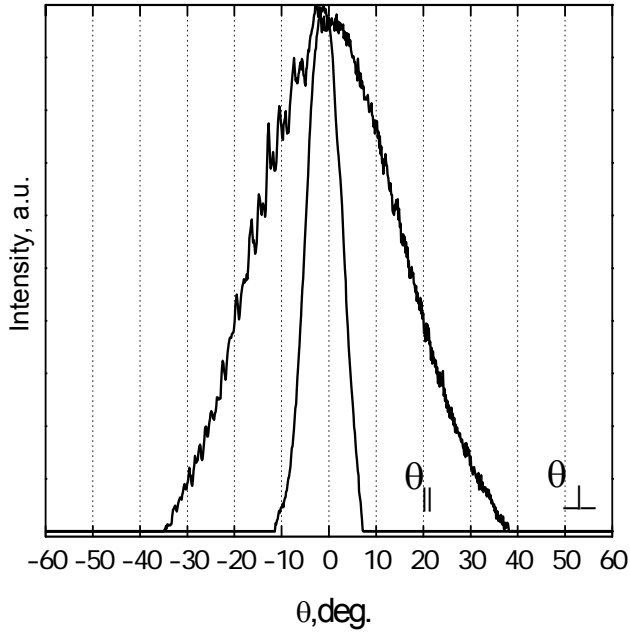
Characteristics	Symbols	Values	Unit
CW Output Power	P_{op}	30	mW
Operating Current	I_{op}	120	mA
Threshold Current	I_{th}	42	mA
Operating Voltage	U_{op}	<2	V
Peak wavelength	λ	1503	nm
FWHM Beam Divergence	$\Theta_{ }$	8.5	deg
	Θ_{\perp}	34	deg
Monitor Current	I_m	87	μ A
Monitor Voltage	U_m	<5	V
Operating Temperature	T_{op}	25	$^{\circ}$ C
Package		9 mm	

Package Dimensions

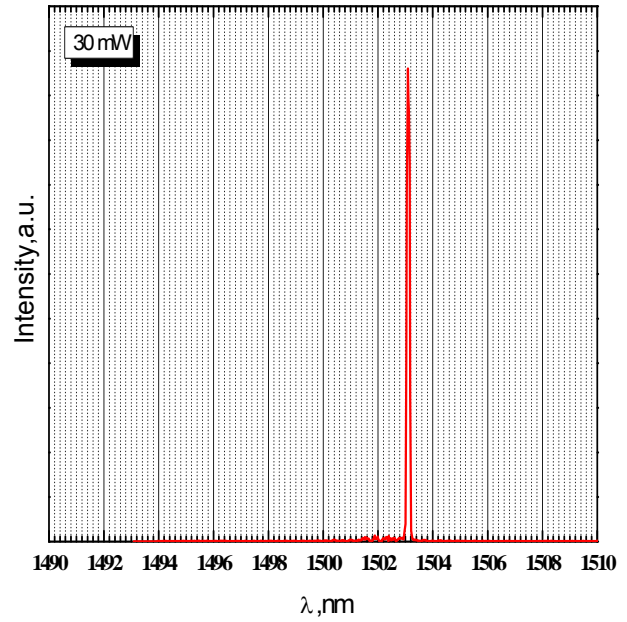
9 mm Package (Unit:mm)



Typical beam divergence



Emitting spectra





Safety of Laser light

- Laser Light can damage the human eyes and skin. Do not expose the eye or skin directly to any laser light and/or through optical lens. When handling the LDs, wear appropriate safety glasses to prevent laser light, even any reflections from entering to the eye. Focused laser beam through optical instruments will increase the chance of eye hazard.



Cautions

1. Operating methode

- This LD shall change its forward voltage requirement and optical output power according to temperature change. Also, the LD will require more operation current to maintain same output power as it degrades. In order to maintain output power, use of APC (Automatic Power Control) is recommended. Which use monitor feedback to adjust the operation current.
- Confirm that electrical spike current generated by swithing on and off does not exceed the maximum operating current level specified herein above as absolute maximum rating. Also, employ appropriate countermeasures to reduce chattering and/or overshooting in the circuit.

2. Static Electricity

- Static electricity or electrical surges will reduce and degrade the reliability of the LDs. It is recommended to use a wrist trap or anti-electrostatic glove when handling the product.

3. Absolute Maximum Rating

- Active layer of LDs shall have high current density and generate high electric field during its operation. In order to prevent excessive damage, the LD must be operated strictly below absolute maximum rating.



NOTE
LASERDIODE
MUST BE COOLED