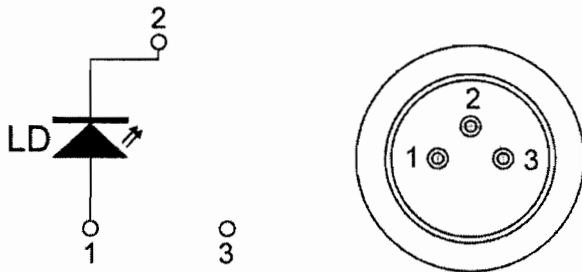


Details

Internal Circuit



Package Type: 5.6 mm

Pin1: LD Anode

Pin2: LD Cathode

(Bottom View)

Caution:

With an external cavity extra precautions have to be taken with regard to the damage threshold of the diode. Creating the external cavity enhances the intracavity power for a given current through the laser diode, meaning that maximum current and maximum voltage can only be applied in cases where a relatively low feedback of a few percent is made. In most cases maximum current has to be restricted to ensure that the maximum intracavity power does not exceed that of the free running laser diode. Thus, maximum power, as specified for a free running laser diode as per the data sheet, may not be necessarily reached.

The characteristics given below are typical values achieved with this diode in the TOPTICA Photonics diode laser system DL 100. The (*)-marked parameters are strongly dependent on the properties of the external cavity. Running the diode without external feedback will reduce output power and slope efficiency for a given current, while the threshold current increases or does not exist. The power is specified for the central part of the tuning range and can be lower at mits edges.

Absolute Maximum Ratings (T_c=20.0°C)

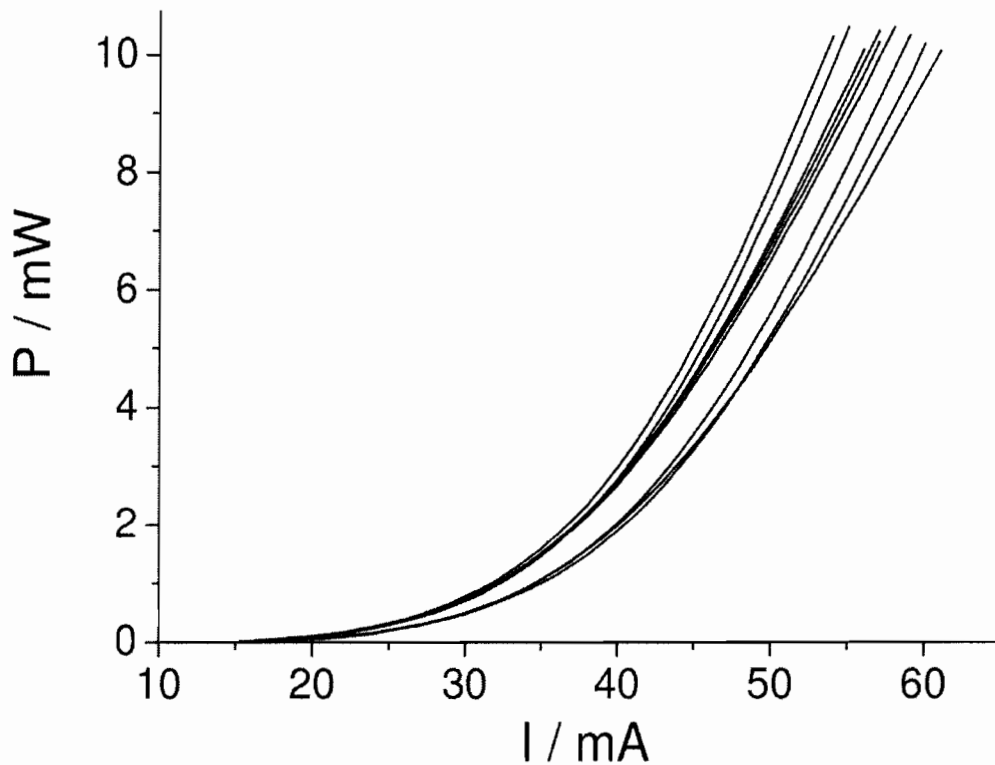
Item	Symbol	Value	Unit
Optical Output Power*	P _o	10.0	mW
Operating Temperature	T _{op}	15.0 to 30.0	°C

Optical and Electrical Characteristics (T_c=20.0°C)

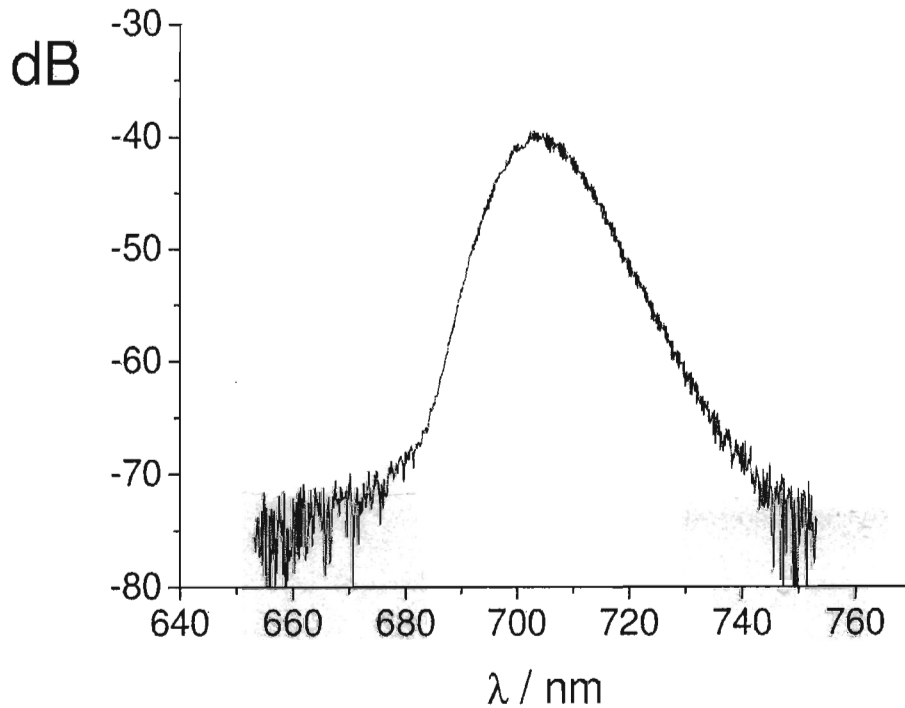
Item	Symbol	Min	Typ	Max	Unit	Testconditions
Threshold Current*	I _{th}	20.0	25.0	35.0	mA	-
Operating Current*	I _{op}	-	50.0	60.0	mA	P _o =10.0mW
Operating Voltage	V _{op}	-	2.4	-	V	P _o =10.0mW
Typical tuning range*	λ _p	700.0	707.0	714.0	nm	-

Curve Characteristics

Typical power vs. current characteristics of #LD-0710-0010-AR-1

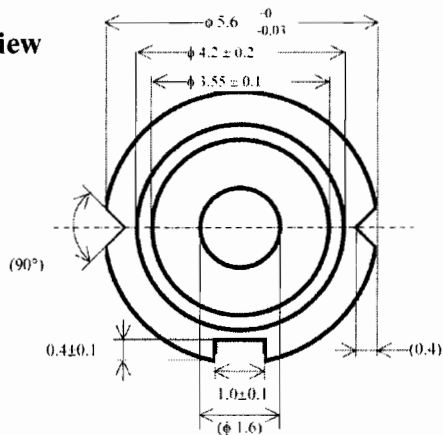


Typical spectrum of #LD-0710-0010-AR-1 at 45 mA



Package Dimensions

Top View



Side View

