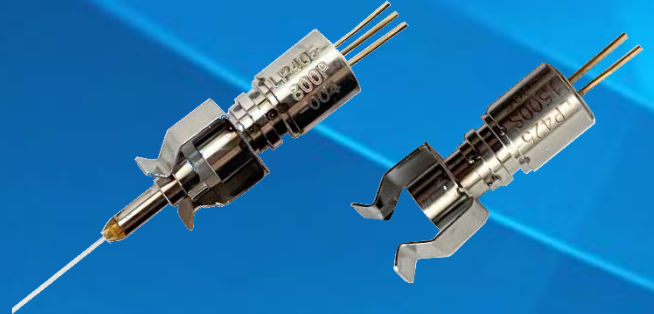


# UV-Violet-Blue Single Emitter Fiber-coupled Diode Laser

425nm/1.2W



## GENERAL DESCRIPTION

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The LP series of receptacle laser diode modules are very convenient for implementing into systems and instruments. The receptacle will accept 2.5mm-diameter zirconia ferrule connector for user supplied fiber coupling. It allows the use an optical fiber of any desired length, and allows for easy replacement. LPC-425-1.20-10522C operates at 425nm and produces output power of 1.2W from 105 $\mu$ m core fiber. The whole device features compact package and good coupling efficiency.

## SERVICE

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Optionally, we offer the complete value chain:

We design and develop laser modules which are optimized to meet the specific requirements of your application.

In order to evaluate the performance of the lasers in the design phase we offer the rapid manufacture of prototypes and small series production.

## APPLICATIONS

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- Laser Direct Imaging (LDI) in PCB manufacturing
- Fluorescence excitation

## FEATURES

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- Compact receptacle package
- Suitable for 105 $\mu$ m core fiber with 2.5mm-diameter ferrule termination
- 425nm central wavelength
- Up to 1.2W of optical power

## Specifications

### Optical & Electrical (25°C)

Parameter	Symbol	Minimum	Typical	Maximum	Test Conditions
Output power	$P_o$		1.2W		From a fiber with 105 $\mu$ m core 0.22N.A.
Center wavelength	$\lambda_c$	420nm	425nm	430nm	$P_o=1.2W$
Spectral width (FWHM)	$d\lambda$			6nm	$P_o=1.2W$
Slop efficiency	SE		1.6		CW
Threshold current	$I_{th}$		120mA	200mA	CW
Operating current	$I_{op}$		850mA	1000mW	$P_o=1.2W$
Forward voltage	$V_f$		4.2V	5.4V	$P_o=1.2W$
Ferrule type		2.5mm ceramic			

### Absolute Maximum Ratings

Parameter	Symbol	Minimum	Maximum	Test Conditions
Reverse voltage	$V_r$		2V	
Operating case temperature	$T_{op}$	5°C	25°C	
Storage temperature range	$T_{stg}$	-40°C	+85°C	
Relative humidity	RH		75%	Noncondensing
Lead soldering time	$T_{sol}$	-	3sec.	350°C

## Dimensions

Unit: mm

