

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

380nm/180mW

#### **GENERAL DESCRIPTION**

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-380-0.18-10522C operates at 380nm and produces output power of 180mW from 105µm core fiber. The whole device features compact package and good coupling efficiency.

#### FEATURES

- Compact receptacle package
- Suitable for 105µm core fiber with
  2.5mm-diameter ferrule termination
- 380nm central wavelength
- Up to 180mW of optical power

#### SERVICE

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**

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



## Specifications

#### Optical & Electrical (25°C)

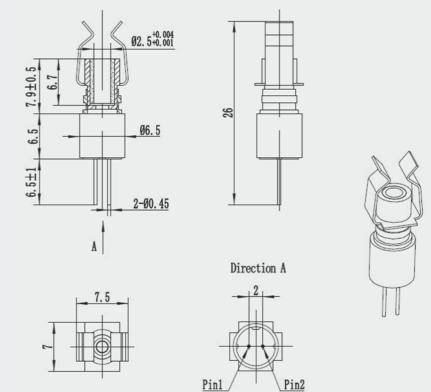
Parameter	Symbol	Minimum	Typical	Maximum	Test Conditions
Output power	Po		180mW		From a fiber with 105 $\mu$ m core 0.22N.A.
Center wavelength	λ <sub>c</sub>	375nm	380nm	385nm	Po=180mW
Spectral width (FWHM)	dλ			6nm	Po=180mW
Slop efficiency	SE		1.2		CW
Threshold current	I <sub>th</sub>		200mA	275mA	CW
Operating current	I <sub>op</sub>		325mA	425mW	Po=180mW
Forward voltage	$V_{\rm f}$		4.4V	5.5V	Po=180mW
Ferrule type		2.5mm ceramic			

#### Absolute Maximum Ratings

Parameter	Symbol	Minimum	Maximum	Test Conditions
Reverse voltage	Vr		2V	
Operating case temperature	T <sub>op</sub>	20°C	30°C	
Storage temperature range	T <sub>stg</sub>	-40°C	+85°C	
Relative humidity	RH		75%	Noncondensing
Lead soldering time	T <sub>sol</sub>	-	3sec.	350°C

### Dimensions

Unit: mm



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