



## APCD-520-01-C3

- GREEN Laser Diode Module
- 520 nm, <4 mW
- Ø 4 mm
- Automatic Power Control
- Fix Collimated Acryl Lens



### Description

APCD-520-01-C3 is a multi-purpose compact size fix collimated green laser diode module with a typical emission wavelength of 520 nm, and an optical output power of <4 mW. It features **low current consumption** with **automatic power control (APC)** driving electronics and integrated **surge current protection**. It can optionally be configured for up to 2 MHz PWM operation.

### Maximum Ratings

Parameter	Values		Unit
	Min.	Max.	
Power supply voltage		7	V
Operating temperature	0	+ 50	°C
Storage temperature	0	+ 85	°C

### Electro-Optical Characteristics (T<sub>CASE</sub> = 25°C)

Parameter	Values			Unit
	Min.	Typ.	Max.	
Peak Wavelength	510	520	530	nm
<b>Output Power</b>	<b>2</b>		<b>4</b>	<b>mW</b>
Beam diameter @ aperture		~ 1.3		mm
Beam diameter @ 10 m			20	mm
Beam divergence		2		mrad
Operating Current (V <sub>CC</sub> =6V)			100	mA
<b>Supply Voltage</b>		<b>6</b>	<b>6.5</b>	<b>VDC</b>
PWM control mode*	100		2000	kHz
Dimensions	Ø 4 x 8.5			mm
Material body	Brass (GND)			
Material lens	Acryl			
Leads	2 x 60 mm AWG 24			

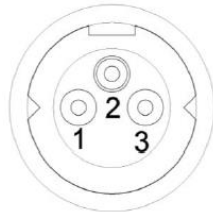
\* optionally, C=10 µF, duty cycle = 50%



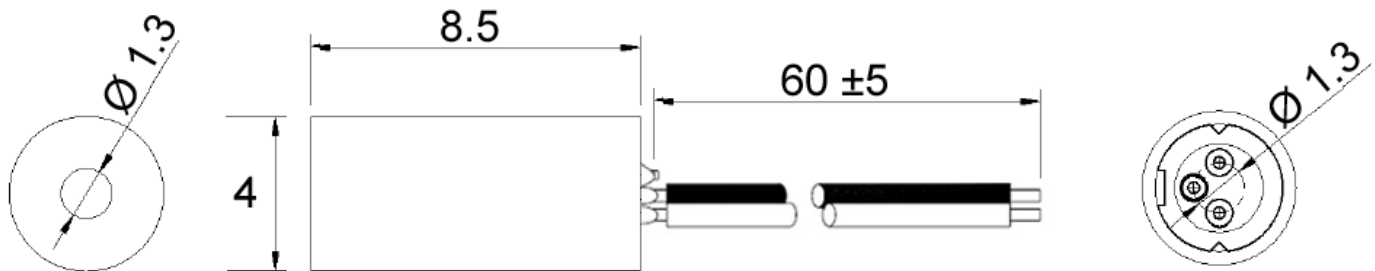


## Electrical Connection

Pin #	Function
Pin 1	Vcc
Pin 2	GND
Pin 3	PWM (optional)



## Outline Dimensions



all dimensions in mm

## Precautions

### Static Electricity:

Precautions against electrostatic discharge (ESD) must be taken when handling or operating the module. Surge voltage or electrostatic discharge can result in complete failure of the laser diode.

### Safety:

This laser module emits highly concentrated visible light which can be **hazardous to the human eye and skin**. It is classified as **CLASS 3R laser product** according to IEC 60825-1 and 21 CFR Part 1040.10 Safety Standards. Actual laser light emitted and precautions necessary strongly depend on mode of operation.

