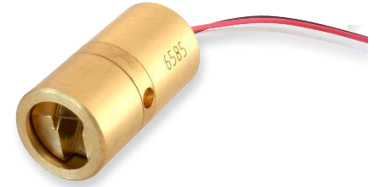




APCM-5165-01-C2

- DUAL Color Laser Diode Module
- 520 nm + 655 nm, <1 mW
- Single Beam Axis
- Automatic Power Control



Description

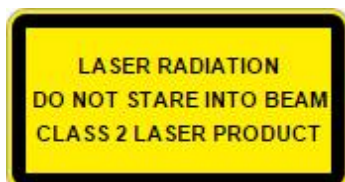
APCM-5165-01-C2 is a compact size fix collimated **dual color** laser diode module with a typical emission wavelength of **520 nm + 655 nm**, and optical output power of **<1 mW**, with an overlapping **single beam emission** through internal **beam combining optic**. It features **automatic power control (APC)** driving electronics, optimized for **low current consumption**, with integrated **surge current protection**. Both wavelengths can be operated independently from each other.

Maximum Ratings

Parameter	Values		Unit
	Min.	Max.	
Power supply voltage		6.5	V
Optical Output Power		<1	mW
Operating temperature	0	+ 50	°C
Storage temperature	0	+ 85	°C

Electro-Optical Characteristics (T_{CASE} = 25°C)

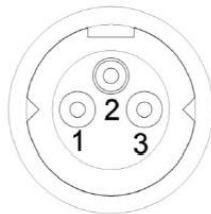
Parameter	Min.	Values		Unit	
		Typ.	Max.		
GREEN	Peak Wavelength	510	520	530	nm
	Output Power	0.5		0.9	mW
	Operating Current (V _{CC} =6V)			100	mA
RED	Peak Wavelength	645	655	660	nm
	Output Power	0.5		0.9	mW
	Operating Current (V _{CC} =6V)			45	mA
Beam diameter @ 10 m			20	mm	
Beam divergence		2		mrad	
Supply Voltage		6	6.5	VDC	
Dimensions		Ø 15 x 29		mm	
Material body		Brass (GND)			
Material lens		Acryl			
Leads		3 x 100 mm AWG 24			



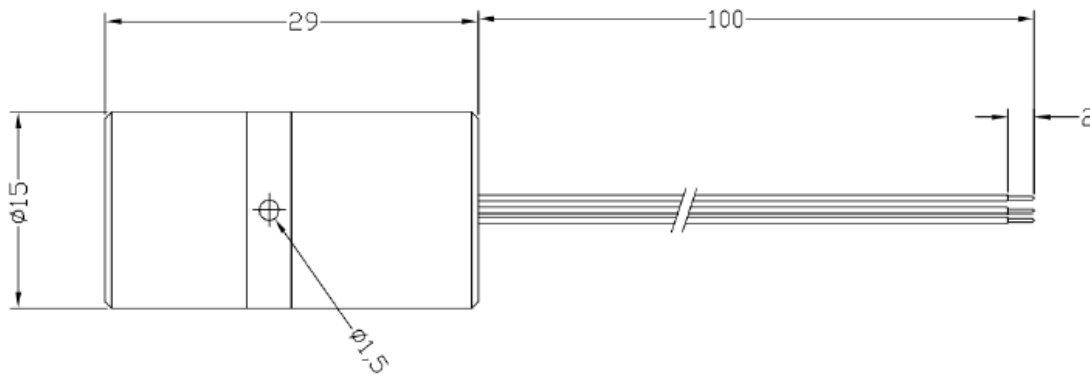


Electrical Connection

Pin #	Function
Pin 1	V _{CC} 520 nm (Red wire)
Pin 2	GND (Black wire)
Pin 3	V _{CC} 655 nm (White wire)



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 2 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.

