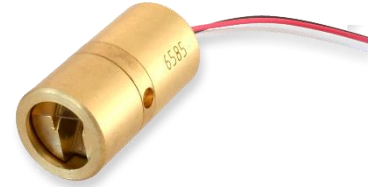




APCM-6585-01-C3

- DUAL Color Laser Diode Module
- 655 nm + 845 nm, <4 mW
- Single Beam Axis
- Automatic Power Control



Description

APCM-6585-01-C3 is a compact size fix collimated **dual color** laser diode module with a typical emission wavelength of **655 nm + 845 nm**, and optical output power of **<4 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 | | 6.0 | V |
| Optical Output Power | | <5 | mW |
| Operating temperature | 0 | + 50 | °C |
| Storage temperature | 0 | + 85 | °C |

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

| Parameter | Values | | | Unit | |
|----------------------|---|------|------|------|----|
| | Min. | Typ. | Max. | | |
| RED | Peak Wavelength | 645 | 655 | 660 | nm |
| | Output Power | 2 | | 4 | mW |
| | Operating Current (U _{CC} =3V) | | | 45 | mA |
| IR | Peak Wavelength | 830 | 845 | 855 | nm |
| | Output Power | 2 | | 4 | mW |
| | Operating Current (U _{CC} =3V) | | | 60 | mA |
| Beam diameter @ 10 m | | | 20 | mm | |
| Beam divergence | | 2 | | mrad | |
| Supply Voltage | | 3 | 6 | VDC | |
| Dimensions | Ø 15 x 29 | | | mm | |
| Material body | Brass (GND) | | | | |
| Material lens | Acryl | | | | |
| Leads | 3 x 100 mm AWG 24 | | | | |

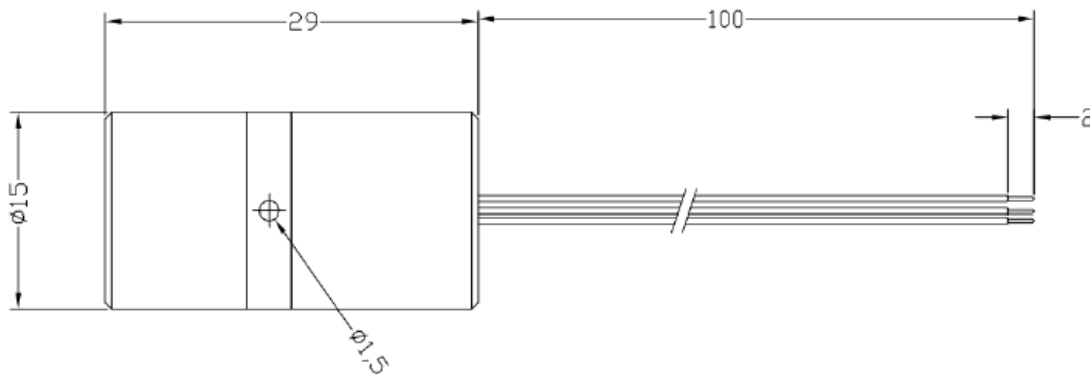




Electrical Connection

| Lead | Function |
|------------|------------------------|
| Red wire | U _{CC} 845 nm |
| Black wire | GND |
| White wire | U _{CC} 655 nm |

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.

