

# STAR450F5

- Compact Blue Laser Diode Module
- 450 nm, 5 mW
- Modulation <500 kHz
- Glass Lens

#### Description

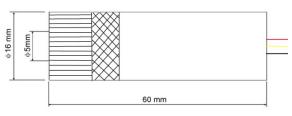
COMPLIANT PL-Free

**STAR450** series of Laser diode modules has been designed with emphasis on *superior beam quality*, high power stability, and *reliable operation*. The modules body is made of black anodized aluminum, enclosing laser diode, lens, and driving electronics. STAR450 features a *focusable glass lens optic* with a locking mechanism. It can thus be used for long range applications and very short working distances alike. The *incorporated 6 VDC driver* circuit supports *TTL modulation up to 500 kHz*.

### Specifications

| Parameter                 | Value                    |             |
|---------------------------|--------------------------|-------------|
| Wavelength                | 450 nm                   |             |
| Output Power              | 5 mW                     |             |
| Laser Class               | 3B                       |             |
| Beam Diameter at Aperture | 5 x 2 mm                 |             |
| Beam Divergence           | 0.3 mrad                 |             |
| Operating Voltage         | 6 VDC                    |             |
| Operating Current         | 40 mA                    |             |
| Modulation (TTL)          | < 500 kHz                |             |
| Operating Temperature     | -10°C+60°C               |             |
| Storage Temperature       | -30°C+80°C               |             |
| Material Body             | Aluminum, black anodized |             |
| Material Lens             | Glass                    | LASER R     |
| Dimensions                | Ø 16 mm x 60 mm          | AVOID EXPOS |
| Leads (26AWG PVC free)    | 0.25 mm² x 170 mm        | CLASS 3B LA |
| MTTF                      | 8000 h                   |             |

#### Drawing



## **Electrical Connection**

| Lead   | Description        |
|--------|--------------------|
| Red    | +VDC*1             |
| Black  | GND                |
| Yellow | Modulation Input*2 |

\*<sup>1</sup> module body electrically connected to +VDC

\*<sup>2</sup> for CW operation, modulation input must be connected to +VDC

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