



FRSM-638-030-10-10-00-A

# **SM Fiber Pigtailed Red Laser**

#### **PRODUCT OVERVIEW**

II-VI's family of fiber pigtailed laser products and dual-color fiber combiners offers multi-wavelength choices covering the spectral band from blue to IR, including 405 nm, 440 nm, 515 nm, 520 nm, 532 nm, 635 nm, 660 nm, 785 nm, 808 nm, 1064 nm, and other customized wavelengths. Varied fiber options (single-mode, PM, and multimode) and customized fiber output collimators are available.

#### **Features**

- High reliability
- High stability

### **Applications**

- Laser pointers
- Laser displays
- Test and Measurement sources
- Survey equipment





# **SM Fiber Pigtailed Red Laser**

## **Product Specifications**

| Parameter                        |          | Min   | Typical              | Max     | Conditions                               |
|----------------------------------|----------|---|----------------------|---------|--|
| Optical                          |          |   |                      |         |  |
| Wavelength                       |          | 630 nm  | 638 nm               | 645 nm  | At P <sub>o</sub> = 30 mW & 25°C         |
| Output Power                     |          | -   | 30 mW <sup>(1)</sup> | -       | At 25°C                                  |
| Power Stability                  |          | -   | -                    | ±2.5%   | APC, 2 h @ P <sub>o</sub> = 30 mW & 25°C |
| M Squared                        |          | -   | -                    | 1.1     |  |
| Operating Temperature (case)     |          | Recommended temperature on data sheet                         |                      |         | Within case temperature, -10~60°C        |
| Electrical                       |          |   |                      |         |  |
| LD Working Current               |          | -   | 150 mA               | 200 mA  | At P <sub>0</sub> = 30 mW & 25°C         |
| LD Working Voltage               |          | -   | 2.8 V                | 3.3 V   | At P <sub>o</sub> = 30 mW & 25°C         |
| Monitor Current                  |          | 100 μΑ  | 500 μΑ               | 1300 μΑ | At P <sub>0</sub> = 30 mW & 25°C         |
| Fiber                            |          |   |                      |         |  |
| Fiber Type                       |          | 4.0 μm/125 μm SM fiber  |                      |         | -  |
| Fiber Numerical Aperture         |          | -   | 0.13                 | -       | -  |
| Fiber Length                     |          | 1 m   | -                    | -       | -  |
| Fiber Jacket (diameter)          |          | 900 µm buffer   |                      |         | -  |
| Fiber Termination <sup>(2)</sup> |          | Without connector   |                      |         | -  |
| Mechanical                       |          |   |                      |         |  |
| Laser Head<br>Dimensions         | Length   | -   | 28.4 mm              | 29 mm   | -  |
|                                  | Diameter | -   | 8 mm                 | -       | -  |
| Reliability                      |          |   |                      |         |  |
| Storage Humidity                 |          | 5%~85% RH   |                      |         | Non-condensing                           |
| Storage Temperature              |          | -20 to 60°C   |                      |         | Non-condensing                           |
| Shock                            |          | 500 g, 1 ms, 5 times/axis, 3 axes tested                      |                      |         |  |
| Vibration                        |          | 5 g, 10-500 Hz, 4 min/cycle, 15 cycles/axis,<br>3 axes tested |                      |         |  |
| Expected Lifetime (MTTF)         |          | 10,000 h  | -                    | -       | At rated power & room temp.              |

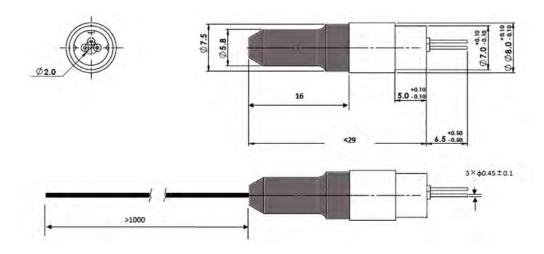
 $<sup>\</sup>ensuremath{^{(1)}}\mbox{Output}$  power from the fiber termination.

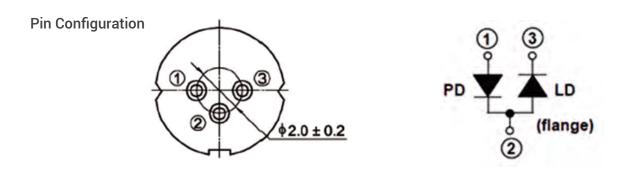
<sup>&</sup>lt;sup>(2)</sup>FC/APC, FC/PC, or SMA905 is optional.

# **SM Fiber Pigtailed Red Laser**

### Dimensions and Pin Configuration (Unit: mm)

Dimensions (Unit: mm)





1. PD Anode; 2. LD Anode/PD Cathode; 3. LD Cathode