

II-VI



FRSM-638-050-10-10-00-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

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Product Specifications

Parameter	Min	Typical	Max	Conditions	
Optical					
Wavelength	633 nm	639 nm	643 nm	At P _o = 50 mW & 25°C	
Output Power	45 mW	50 mW ⁽¹⁾	55 mW	At 25°C	
Power Stability	-	-	±2.5%	APC, 2 h @ P _o = 50 mW & 25°C	
M-Square	-	-	1.1		
Operating Temperature (case)	Recommended temperature on data sheet			Within case temperature, -10~60°C	
Electrical					
LD Working Current	-	185 mA	200 mA	At P _o = 50 mW & 25°C	
LD Working Voltage	-	2.9 V	3.2 V	At P _o = 50 mW & 25°C	
Monitor current	-	600 μA	1000 μA	At P _o = 50 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 ⁽²⁾	Without connector			-	
Mechanical					
Laser Head 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, 3 axes tested				
Expected Lifetime (MTTF)	10,000 h	-	-	At rated power & room temp.	

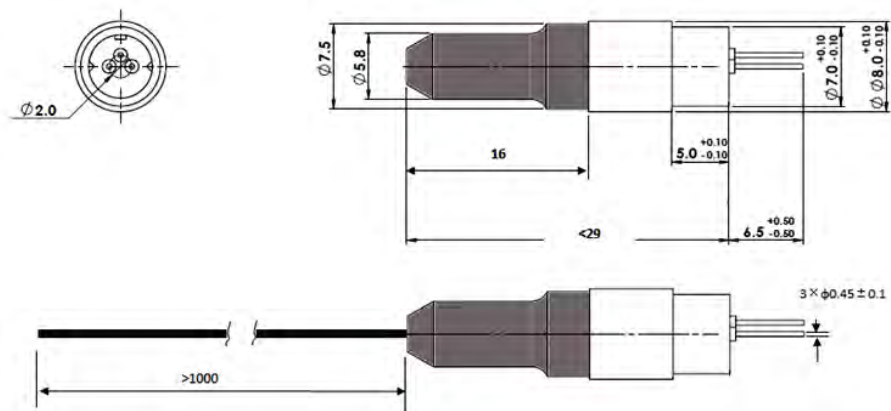
⁽¹⁾Output power from the fiber termination.

⁽²⁾FC/APC, FC/PC or SMA905 is optional.

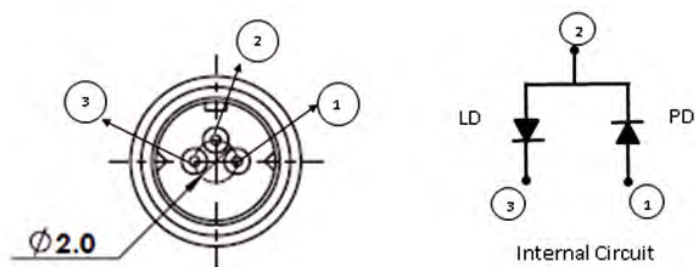
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Dimensions and Pin Configuration (Unit: mm)

Dimensions (Unit: mm)



Pin Configuration



1. PD Anode; 2. COM (LD Anode, PD Cathode); 3. LD Cathode