SM FIBER PIGTAIL RED LASER

638nm Fiber Coupled Diode Laser

BeamQ Inc. manufactures various types of fiber coupled diode lasers, based on our over 10 years micro lensed fiber and optical thin film coating experience, we have developed a unique technology of fiber to diode directly coupling solution, which achieves high power coupling efficiency without additional optical elements. This solution is cost-effective and significantly reduces the new product development cycle. We welcome your customized designs, most of the TO lasers which wavelength covering from 380nm to 1600nm can be coupled to appropriate fiber types. Our vision is making the light into the fiber easier.

FEATURES

- High output power
- With isolation of 1064nm
- Excellent thermal conductivity
- Excellent beam quality

APPLICATIONS

- Indicator light for laser system
- RGB source for laser displays
- Laser source for optical test systems
- Laser source for bio-detection

Product Specifications

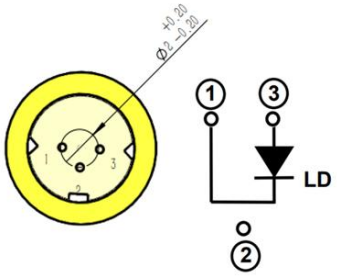
Parameter	Min	Typical	Max	Conditions
Optical				
Center Wavelength	634nm	638nm	644nm	At Po = 100mW & 25℃
Output Power	80mW	100mW	130mW	At Iop = 250mA & 25℃
Power Stability			±3%	
Light Beam M^2			1.1	
Operating Temperature (case)	-10℃	25℃	60℃	Recommended copper base for good thermal conductivity
Electrical				
Threshold Current		50mA	70mA	
Operating Current		230mA	250mA	At Po = 100mW & Tcase = 25℃
Operating Voltage		2.8V	3.1V	At Po = 100mW & Tcase = 25℃
Reverse Breakdown Voltage		1.9V	2.0V	
Fiber				
Numerical Aperture		0.13		
Fiber Length	>1.0m			
Fiber Tube (diameter)	0.9mm Black loose tube			
Fiber Termination	Bare fiber or FC/APC			Custom
Mechanical				
Max Outside Diameter		8mm		
Max Length	27mm	28mm	29mm	
LD Mounting Fixture	Square/Arched			Optional
Reliability				
Storage Humidity	5% ~ 85% RH			Non-condensing
Storage Temperature	-20 ~ 60℃			Non-condensing
Single Feedback Isolation	15dB	17 dB	20 dB	950nm~1100nm or 900nm~1000nm
Dual Feedback Isolation	>30dB			950nm~1100nm or 900nm~1000nm

Product Code and Ordering Information

FJ-(Company Abbreviation)	**6XX**（Wavelength）	**XXX**(Power)	**ISO-XXX** (System Back Reflection Isolation)	**XX**(Fiber Termination)
FJ-	638 - 638nm	080 = 80mW 100 = 100mW 120 = 120mW	000 for No Isolation 15A for 15dB 950~1100nm Isolation 30A for 15dB 950~1100nm Isolation 15B for 15dB 900~1000nm Isolation 30B for 15dB 900~1000nm Isolation	BF =Bare Fiber FC = FC/APC Connector CF =Customized Ferrule

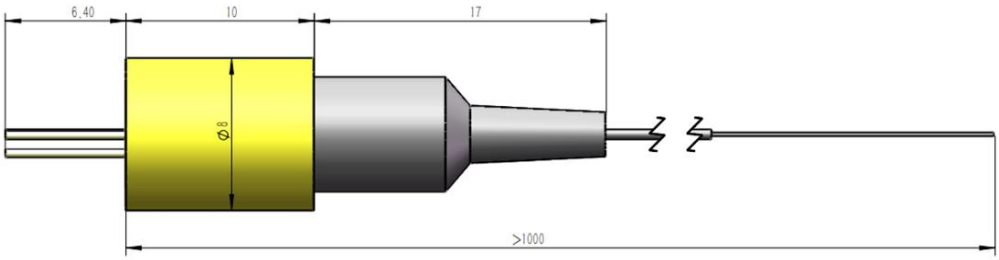
Example：FJ-638-100-15A-BF

Dimensions and Pin Configuration



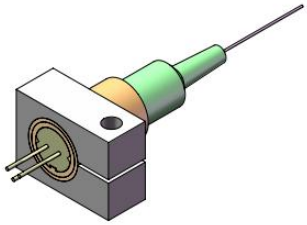
Pin Configuration

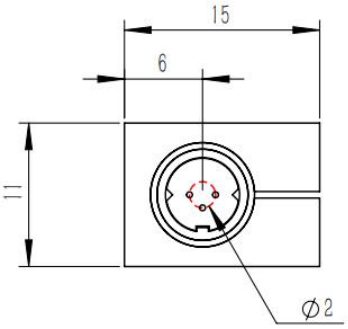
1. LD Cathode(-) 2. N/A 3. LD Anode(+)

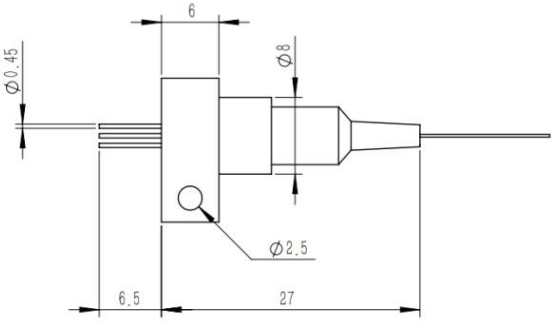


Dimensions（Unit: mm）

Square Fixture Assembly







Arched Fixture Assembly