

## Q-mount high power laser diode

### Characteristics:

- High reliability
- Au-Sn hard solder
- High brightness
- High stability

### Applications:

- Solid-state laser pumping
- Material processing
- Medical/Life and health sciences
- Illumination

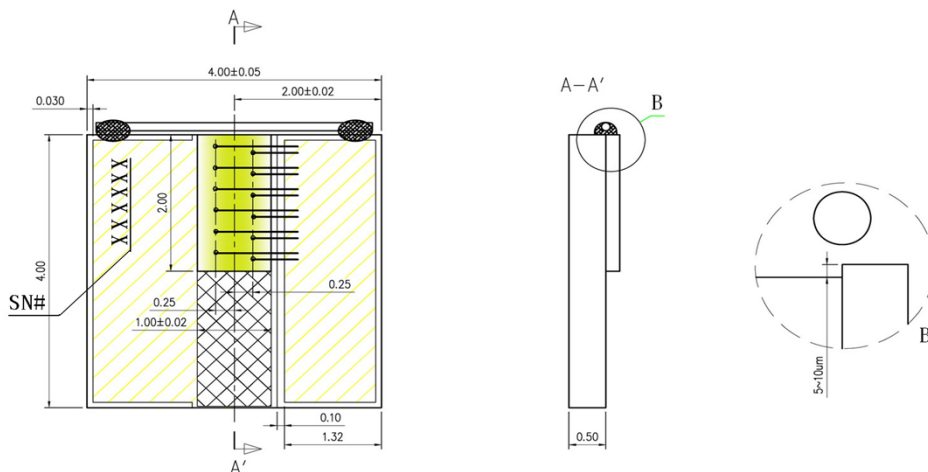


### Characteristics:

Characteristics (@25° )	Symbol							Unit
Output Power	P <sub>o</sub>	1.0	2.0	3.0	4.0	5.0	8.0	W
Operating Current	I <sub>op</sub>	1.1	2.0	3.0	4.3	5.5	8.5	A
Threshold Current	I <sub>th</sub>	0.2	0.35	0.45	0.9	1.0	1.2	A
Wavelength	λ <sub>c</sub>	808 / 915 / 940 / 976						nm
Wavelength Tolerance		+/-3	+/-3	+/-3	+/-3	+/-3	+/-3	nm
Emitter size	W	150	150	100 or 150	200	200	200	um
Spectral Width (FWHM)	Δλ	<3	<3	<3	<3	<3	<3	nm
Wavelength Temperature Coeff.	Δλ/ΔT	0.3	0.3	0.3	0.3	0.3	0.3	nm/° C
Slope Efficiency	η	>1.1	>1.1	>1.1	>1.1	>1.1	>1.1	W/A
Polarization	TM/TE	TE	TE	TE	TE	TE	TE	
Power Conversion Efficiency	η <sub>TOT</sub>	50	50	50	50	50	50	%
Parallel beam divergence	θ <sub>  </sub>	8	8	8	8	8	8	Deg
Perpendicular beam divergence	θ <sub>⊥</sub>	36	36	36	36	36	36	Deg
Thermal resistance	R <sub>th</sub>	10	10	10	10	10	10	° C/W
<b>Electrical</b>								
Maximum Operating Voltage	V <sub>op</sub>	≤2.0						V
Maximum Reverse Voltage	V <sub>re</sub>	≤2.5						V
<b>Mechanical</b>								
Housing Dimension		See Drawing						
Soldering Temp		260						° C
<b>Environmental</b>								
Operating Temperature Range	T <sub>op</sub>	15 to 30						° C
Operating Humidity	H <sub>op</sub>	Non-condensing						RH
Storage Temperature Range	T <sub>stg</sub>	-20 to 80						° C

Customized wavelength and power are also available. Please contact IOL for specific requirements.

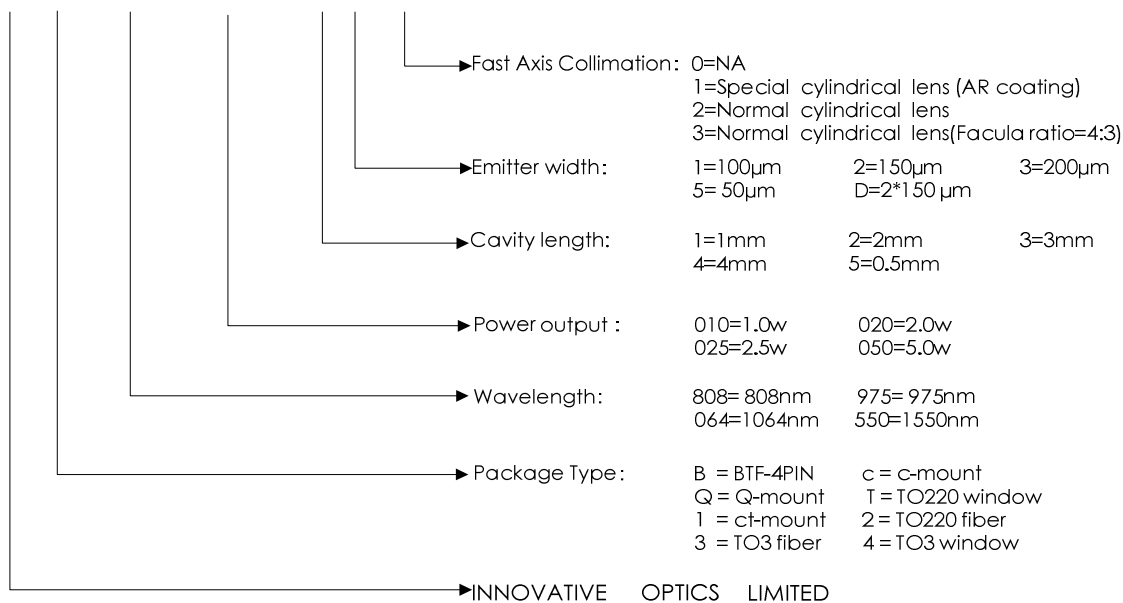
Mechanical:



Customized dimensions are also available. Please contact IOL for specific requirements.

Order information:

IO X1-X2X3X4-X5X6X7-X8 X9 X10



VISIBLE AND/OR INVISIBLE LASER RADIATION  
AVOID EYE OR SKIN EXPOSURE TO DIRECTOR  
SCATTERED RADIATION  
MAXIMUM OUTPUT IS DEPENDANT UPON AND LESS THAN  
INPUT RADIATION EMITTED POWER LEVELS UPON  
FILTER SETTING  
CLASS IV LASER PRODUCT

