

C-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:

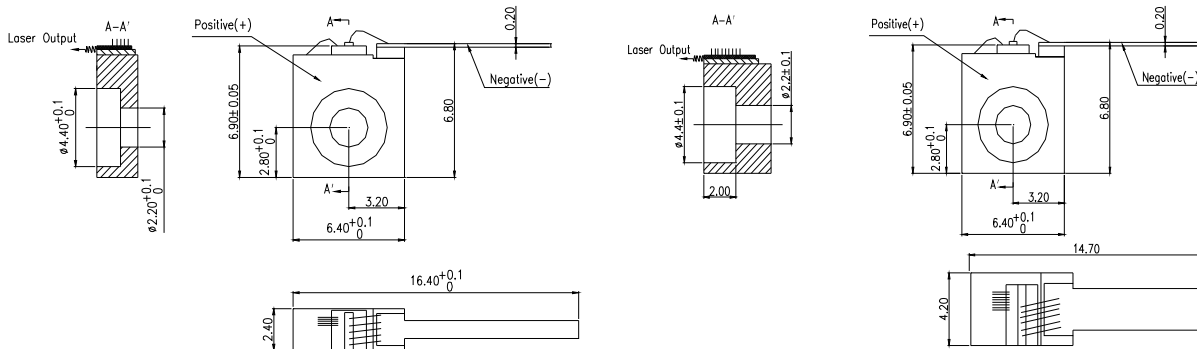
Characteristics (@25°)	Symbol						Unit	
Output Power	P _o	1.0	2.0	3.0	4.0	5.0	W	
Operating Current	I _{op}	1.1	2.0	3.0	4.3	5.5	A	
Threshold Current	I _{th}	0.2	0.35	0.45	0.9	1.0	A	
Wavelength	λ _c	808 / 915 / 940 / 976						nm
Wavelength Tolerance		+/-3	+/-3	+/-3	+/-3	+/-3	nm	
Emitter size	W	150	150	100 or 150	200	200	um	
Spectral Width (FWHM)	Δλ	<3	<3	<3	<3	<3	nm	
Wavelength Temperature Coeff.	Δλ/ΔT	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	W/A	
Polarization	TM/TE	TE	TE	TE	TE	TE		
Power Conversion Efficiency	η _{TOT}	50	50	50	50	50	%	
Parallel beam divergence	θ	8	8	8	8	8	Deg	
Perpendicular beam divergence	θ _⊥	36	36	36	36	36	Deg	
Thermal resistance	R _{th}	10	10	10	10	10	° C/W	
Electrical								
Maximum Operating Voltage	V _{op}	≤2.0						V
Maximum Reverse Voltage	V _{re}	≤2.5						V
Mechanical								
Housing Dimension		See Drawing						
Lead Soldering Temp		260° C for <5 seconds						
Environmental								
Operating Temperature Range	T _{op}	15 to 30						° C
Operating Humidity	H _{op}	Non-condensing						RH
Storage Temperature Range	T _{STG}	-20 to 80						° C

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

Mechanical:

1.0/2.0/3.0/4.0W dimensions

5.0W dimensions



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Order information:

I O X1-X2X3X4-X5X6X7-X8 X9 X10

