

WHAT'S YOUR WAVELENGTH?

WE'VE GOT THAT!



IQ 637 - 980 nm

Single Mode Instrument Quality

DESCRIPTION

Power Technology's Instrument Quality (IQ) series of laser diode modules are designed specifically to address the needs of high-end OEM applications requiring superior optical quality and ultra-stable temperatures, wavelengths & output powers. With wavelengths ranging from 637 nm to 980 nm, IQ series laser modules incorporate quality glass lenses to achieve optical clarity at up to 3000 mA of drive current. For added beam quality, users may choose an IQ module with beam circularization. All IQ lasers feature a precision operating current source and a PID temperature control loop that allows the unit to operate optimally at 5VDC at a wide temperature range of 15-35 C. This creates less excess heat within the laser module, increasing diode lifetime, efficiency and reliability.

APPLICATIONS

- Metrology
- Microscopy
- Bio-Analytic
- Life Sciences
- Laser Displays

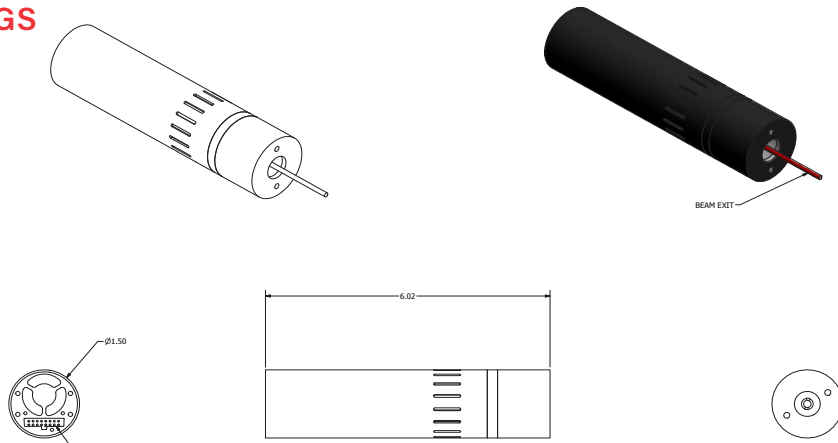
FEATURES & BENEFITS

- Beam Pointing Stability < 5 μ Rad/ °C
- Stable Wavelengths & Output Power
- Optional Beam Circularization
- Adjustable Focus
- CW Digital/Analog Output
- PID Temperature Control Loop

SPECIFICATIONS

PART NUMBER	B062	B063	B064	B065	B066	B067	B068	B069	B070	B071	B072
Wavelength (nm)	637	640	640	647	660	685	730	785	808	980	980
Output Power (mW)	140	40	100	120	100	40	30	100	150	100	150
Temperature Stability (°C)	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1
Collimated Beam Size (1/e ²)	0.95 x 1.80	1.06 x 2.22	0.90 x 1.48	0.85 x 2.43	1.06 x 1.80	0.96 x 2.22	1.21 x 2.41	1.21 x 2.15	1.08 x 2.15	1.35 x 4.87	1.35 x 4.87
Beam Divergence (mrad)	0.86 x 0.46	0.78 x 0.38	0.91 x 0.56	0.98 x 0.36	0.80 x 0.48	0.92 x 0.41	0.78 x 0.40	0.83 x 0.47	0.96 x 0.48	0.94 x 0.30	0.94 x 0.30
Mode Structure	Single	Single	Single	Single	Single	Single	Single	Single	Single	Single	Single
Operating Voltage (VDC)	5	5	5	5	5	5	5	5	5	5	5
Typical Operating Current (mA)	450	450	450	450	450	450	450	450	450	450	450
Max Operating Current (mA)	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000
Temperature Range (°C)	15 - 35	15 - 35	15 - 35	15 - 35	15 - 35	15 - 35	15 - 35	15 - 35	15 - 35	15 - 35	15 - 35
Module Size (Inches)	6.05 x 1.50	6.05 x 1.50	6.05 x 1.50	6.05 x 1.50	6.05 x 1.50	6.05 x 1.50	6.05 x 1.50	6.05 x 1.50	6.05 x 1.50	6.05 x 1.50	6.05 x 1.50

MECHANICAL DRAWINGS



SAFETY WARNINGS



COMPLIANT & REGISTERED



J-STD-001 | 7711/7721 | A-610