

WHAT'S YOUR WAVELENGTH?

WE'VE GOT THAT!



IQ 375 - 488 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 375 to 488 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 8VDC 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
- Lithography
- Laser Displays

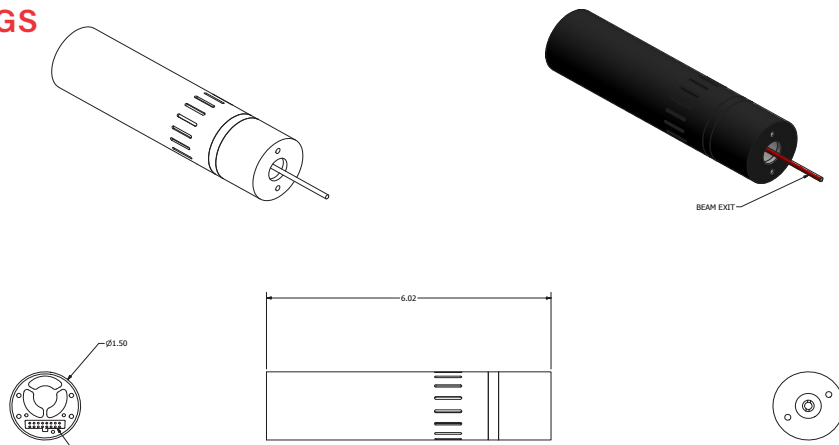
FEATURES & BENEFITS

- 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	B032	B033	B035	B037	B039	B043	B045	B047	B049	B051	B053	B054
Wavelength (nm)	375	375	405	405	405	445	473	488	488	488	488	488
Output Power (mW)	16	50	50	100	180	75	75	20	50	55	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	±0.1
Collimated Beam Size (1/e ²)	0.92 x 2.31	0.92 x 2.31	0.93 x 1.96	0.93 x 1.96	0.93 x 1.96	0.96 x 2.22	0.89 x 2.54	0.72 x 2.74	0.72 x 2.74	0.72 x 2.74	1.02 x 2.80	1.02 x 2.80
Beam Divergence (mrad)	0.53 x 0.30	0.53 x 0.30	0.56 x 0.30	0.56 x 0.30	0.56 x 0.30	0.65 x 0.25	0.54 x 0.22	0.88 x 0.24	0.88 x 0.24	0.88 x 0.24	0.62 x 0.24	0.62 x 0.24
Mode Structure	Single	Single	Single	Single	Single	Single	Single	Single	Single	Single	Single	Single
Operating Voltage (VDC)	8	8	8	8	8	8	8	8	8	8	8	8
Typical Operating Current (mA)	450	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	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	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	6.05 x 1.50

MECHANICAL DRAWINGS



SAFETY WARNINGS



COMPLIANT & REGISTERED



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