

# Senior Laser Design and Manufacturing Engineer Job Description

### **Required Skills**:

- Expertise in the following areas:
  - (1) Semiconductor laser design, fabrication, and test
  - (2) Diffractive optics and waveguides related to single-frequency lasers and PICs
- Hands-on experience with semiconductor laser design, fabrication, testing, and integration
- Proficient with laser characterization testing including LIV, spectral characterization, beam profiling, and laser linewidth measurements
- Proficient in electronics and instrumentation including laser diode drivers, TEC, power supplies, and optical and RF spectrum analyzers
- Proficient with optical alignment techniques and alignment tooling
- Familiarity with design, analysis, and test software tools including for example: Synopsys RSoft, MATLAB, SolidWorks or similar CAD, and programming languages such as Labview, C/C++ used for test and instrumentation systems

### **Desired Skills:**

- Data collection, analysis, and presentation
- Broad understanding of optics, lasers, and vendor capabilities
- Strong problem solving
- Strong interpersonal and multi-tasking skills
- Strong written and verbal communication skills
- Experience presenting to customers
- Experience in technical proposal writing
- Experience leading teams
- Ability to obtain a DoD Security Clearance

### **Duties Include:**

- Provide technical support to ongoing laser design, manufacturing, test, and packaging operations
- Plan / Schedule tasks
- Document and report project status internally and to customers
- Develop, and implement optical / laser hardware and test systems
- Document and report test procedures, results, and analysis
- Interface with customers and vendors
- Assist in writing new technology and capability proposals to inside and outside customers

## **Desired Education:**

• Master of Science in physics, optics, or related engineering field

- Ph.D. in physics, optics, or related engineering field
- 10 years of professional experience with a BS degree, 8 years of professional experience with an MS degree is required

# ABOUT PHOTODIGM

For over 20 years Photodigm, Inc. has been the only 100% U.S.-based semiconductor manufacturer of single spatial and longitudinal mode DBR (Distributed Bragg Reflector) laser diodes. DBR lasers are essential to quantum sensing and atomic clock manufacturers, optical metrology and sensing, and laser spectroscopy. Headquartered in Richardson, Texas, they design and produce fixed wavelength diode lasers best known for their accuracy and reliability.

# BENEFITS

- Compensation will be commensurate with experience.
- Health and Dental Insurance
- Disability Insurance
- Paid Time Off
- 401K

Photodigm, Inc. is an equal-opportunity employer. All qualified applicants will receive consideration for employment without regard to race, ethnicity, color, national origin, sex (including pregnancy, sex stereotyping, gender identity, gender expression or transgender status), religion, age, marital status, sexual orientation, military/veteran status, physical disability, genetic information/history or any other personal characteristic protected by law.