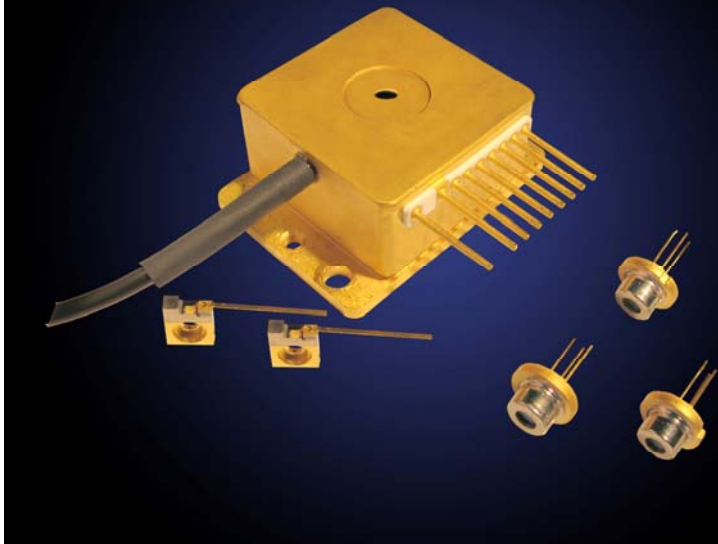


High Power CW Laser Diodes



0.5 - 7 Watts
 High Efficiency Devices
 Multiple Package Options
 High reliability/Long Life
 Applications:

- Diode based medical systems
- Diode pumped solid state lasers
- Analytical equipment
- Illuminators
- Reprographics
- Laser initiated ordnance

Laser Diode Inc's series of High Power CW products is offered with an output range from 0.5 Watts to 7.0 Watts. These devices have a standard wavelength of 805nm +/- 5nm with a spectral width of 2.5 nm FWHM.

Specifications and Limits @ 25°C

| Common Characteristics | Unit | Min | Typ | Max |
|------------------------------|------|-----|---------|-----|
| Peak Wavelength | nm | | 805 | |
| Peak Wavelength Tolerance | nm | | +/-5 | |
| Spectral Width (50% Points) | nm | | 2.5 | |
| Rise/Fall Times | ns | | 1.0 | |
| Far Field Beam Divergence | deg | | 12 x 40 | |
| Efficiency at I _f | % | | 40 | |
| Operating Temperature | °C | -20 | | +30 |
| Storage Temperature | °C | -40 | | +85 |

*Note: Other wavelength tolerances are available

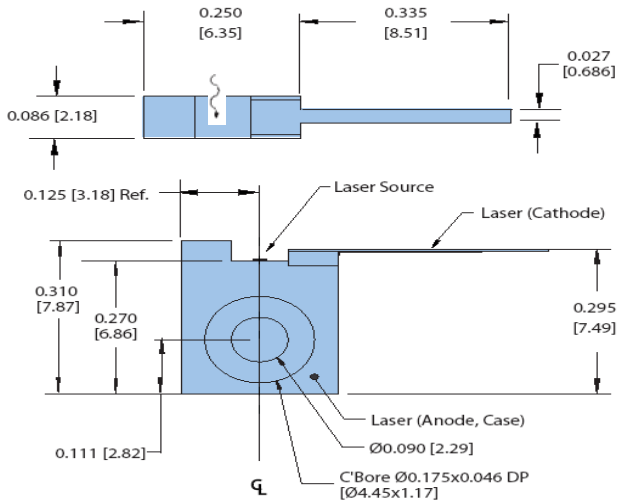
Single Diode Lasers: Laser Characteristics

Laser Characteristics

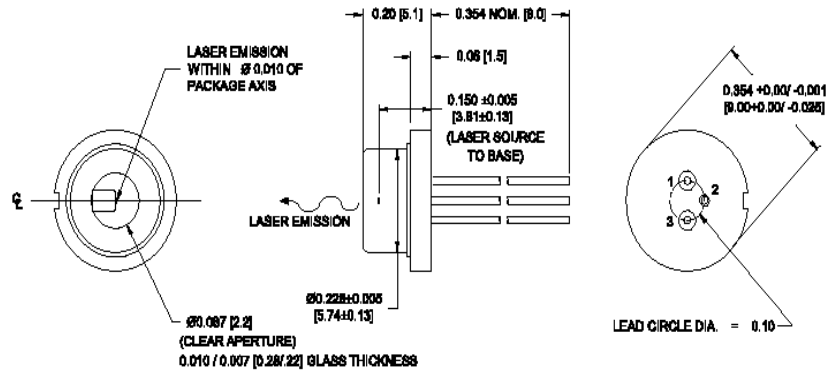
| | Power (watts) | Source Size (µm) | Typical I _{th} (amps) | Max Current (amps) | Typical V _f (volts) |
|----------------|---------------|------------------|--------------------------------|--------------------|--------------------------------|
| CW 0500 Series | 0.5 | 50 | 0.27 | 0.75 | 2.0 |
| CW 1000 Series | 1.0 | 100 | 0.47 | 1.5 | 2.0 |
| CW 2000 Series | 2.0 | 200 | 0.82 | 3.0 | 2.0 |
| CW 5000 Series | 5.0 | 460 | 1.8 | 6.5 | 2.0 |
| CW 7000 Series | 7.0 | 460 | 1.8 | 7.7 | 2.0 |

Package Drawings

C-Mount Package



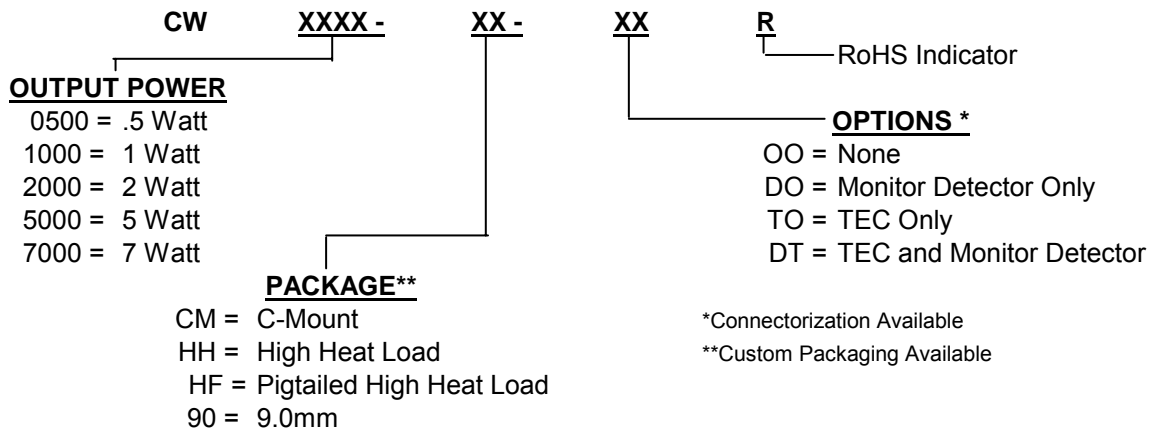
9mm Package



Other package options available.

Ordering Information

Products can be ordered directly from Laser Diode Incorporated or its representatives. When ordering, refer to the information below. For a complete listing of representatives, visit our website at www.laserdiode.com



NOTE: Not all options are available for all packages. Please contact your Sales Representative.

Safety:

Caution: Laser light emitted from any diode laser may be harmful to the human eye. Avoid looking directly into the diode laser aperture when the device is in operation.
Class 4 laser

ESD Caution:

Handle diode lasers with extreme care to prevent electrostatic discharge. Follow ESD precautions. When handling devices.

Warranty:

Please refer to your product purchase agreement for complete details or check with your Laser Diode sales representative.

Notice:

Laser Diode Inc. reserves the right to make changes to the products or information contained herein without notice. Liability is assumed as a result of their use or application.