



## LASER DIODE FOLD-785-225S-VBG

**FOLD-785-225S-VBG** is a single mode semiconductor laser diode with 225mW CW output power at 785nm. Due to the integrated VBG the wavelength is fixed and the spectral width is very narrow. It is suitable for the use in various opto-electronic applications.

### APPLICATIONS:

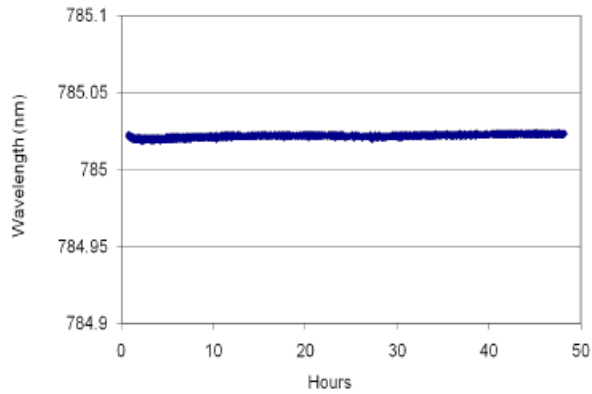
- Raman Spectroscopy
- Bio-Instrumentation
- Metrology
- Sensing
- Analytical Instrumentation

Optical and electrical characteristics (T = 25°C, P = 225mW):

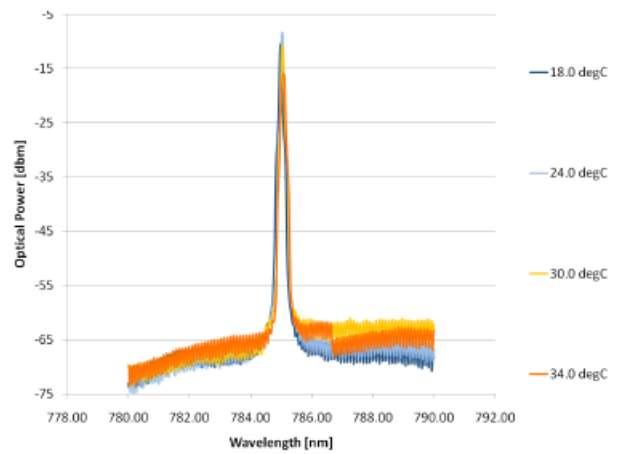
| Operating Parameters           | Symbol               | Min   | Typ | Max  | Unit  |
|--------------------------------|----------------------|-------|-----|------|-------|
| Optical Power                  | $P_{out}$            | -     | 225 | -    | mW    |
| Wavelength                     | $\lambda$            | 784.5 | 785 | 78.5 | nm    |
| Line Width                     | $\Delta\lambda$      | -     | 12  | -    | MHz   |
| Threshold Current              | $I_{th}$             | -     | 80  | 110  | mA    |
| Forward Current                | $I_f$                | -     | 350 | 500  | mA    |
| Forward Voltage                | $V_f$                | -     | 2.0 | 2.8  | V     |
| Slope Efficiency               | $\Delta P/\Delta I$  | -     | 0.6 | -    | mW/mA |
| Beam Divergence, Perpendic.    | $\Theta_{\perp}$     | -     | 0.2 | -    | °     |
| Beam Divergence, Parallel      | $\Theta_{\parallel}$ | -     | 0.1 | -    | °     |
| Operating Temperature          | $T_{op}$             | 0     | -   | 35   | °C    |
| Central Stabilized Temperature | $T_c$                | 15    | 25  | 40   | °C    |
| Stabilized Temperature Range   | $T_r$                | 10    | -   | -    | °C    |
| Storage Temperature            | $T_s$                | -10   | -   | 60   | °C    |
| Polarization                   | 100:1                |       |     |      |       |
| Collimated Beam Diameter       | 0.25x0.7             |       |     |      |       |

## PERFORMANCE AND PACKAGE SPECIFICATION

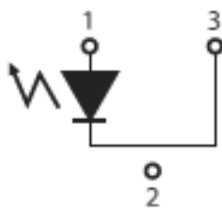
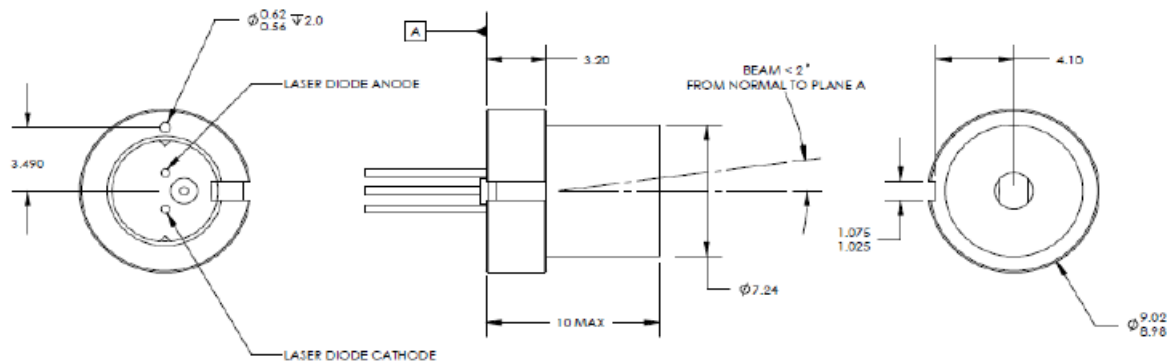
### Wavelength Stability



### Optical Spectrum (Sample)



### Outline Drawing



| Pinout |            |
|--------|------------|
| 1      | LD Anode   |
| 2      | Case       |
| 3      | LD Cathode |