

## LASER DIODE FOLD-780.25-80S-VBG

**FOLD-780.25-80S-VBG** is a single mode semiconductor laser diode with 80mW CW output power at 780.25nm. 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:

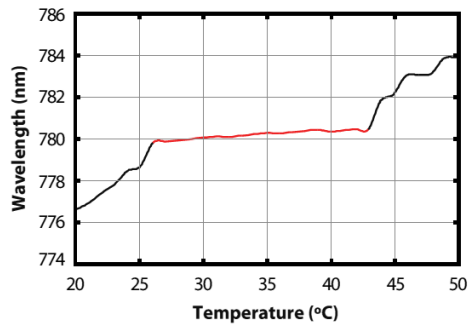
- Raman Spectroscopy
- Metrology
- Bio-Instrumentation
- Graphic Arts
- Sensing
- Analytical Instrumentation

Optical and electrical characteristics (T = 25°C, P = 80mW):

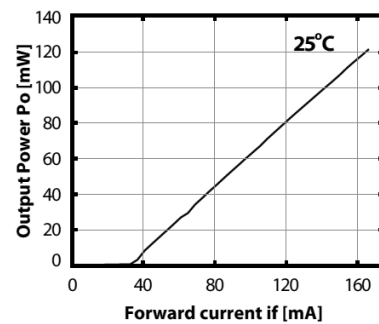
| Operating Parameters           | Symbol           | Min     | Typ    | Max    | Unit  |
|--------------------------------|------------------|---------|--------|--------|-------|
| Optical Power                  | P <sub>out</sub> | -       | -      | 80     | mW    |
| Wavelength                     | λ                | 780.01  | 780.25 | 780.41 | nm    |
| Line Width                     | Δλ               | -       | 50     | 100    | MHz   |
| Threshold Current              | I <sub>th</sub>  | -       | 50     | -      | mA    |
| Forward Current                | I <sub>f</sub>   | -       | 110    | 200    | mA    |
| Forward Voltage                | V <sub>f</sub>   | -       | 1.3    | 2.2    | V     |
| Reverse Voltage                | V <sub>r</sub>   | -       | -      | 2      | V     |
| Slope Efficiency               | ΔP/ΔI            | -       | 0.9    | -      | mW/mA |
| Beam Divergence, Perpendic.    | Θ <sub>⊥</sub>   | -       | 25     | -      | °     |
| Beam Divergence, Parallel      | Θ <sub>  </sub>  | -       | 10     | -      | °     |
| Operating Temperature          | T <sub>op</sub>  | 0       | -      | 40     | °C    |
| Central Stabilized Temperature | T <sub>c</sub>   | 15      | -      | 35     | °C    |
| Stabilized Temperature Range   | T <sub>r</sub>   | 15      | -      | -      | °C    |
| Storage Temperature            | T <sub>s</sub>   | -20     | -      | 70     | °C    |
| Emitter Size                   | E <sub>s</sub>   | 1.5 x 3 |        |        | μm    |
| Coherence Length               | > 2m             |         |        |        |       |
| Polarization Orientation       | TE               |         |        |        |       |

## PERFORMANCE AND PACKAGE SPECIFICATION

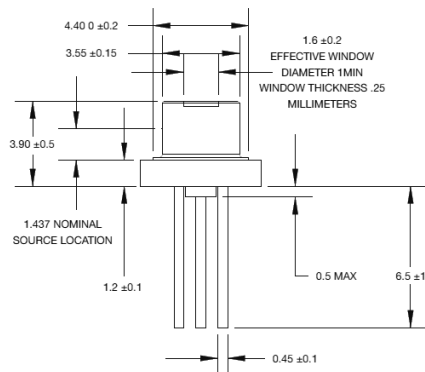
### Stabilized Temperature Range



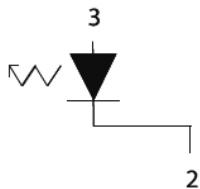
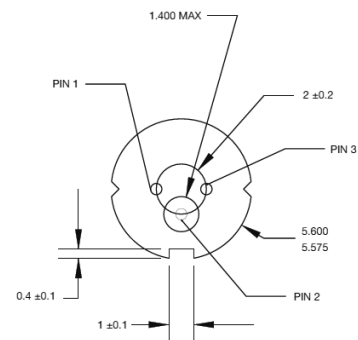
### Output Power vs Forward Current (Typical)



### Side View



### Bottom View



1

| Pinout |               |
|--------|---------------|
| 1      | Not Connected |
| 2      | Case          |
| 3      | LD Anode      |