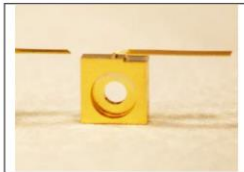


**DATA SHEET: 2780 nm FABRY-PEROT LASER DIODE**

**Product number: FL27200000CM-W3-5mW**



**Specification\***

**T = 20 °C, Continuous-wave operation**

| Parameter                               | Unit             | Min.             | Typ.                | Max. |
|---|------------------|------------------|---------------------|------|
| Resonator length                        | mm               |                  | 1.1                 |      |
| Ridge width                             | μm               | 3                | 4                   | 5    |
| Threshold current                       | mA               |                  | 80                  |      |
| Operating current                       | mA               | 0                | <240                | 250  |
| Operating voltage @ 0.2 A               | V                |                  | 1.5                 | 2.0  |
| Peak output power                       | mW               |                  | 4                   | NA   |
| Center wavelength @ 0.2 A               | nm               | 2760             | 2780                | 2820 |
| Spectral bandwidth @0.2 A               | nm               |                  | <5                  |      |
| <b>Beam shape and mode properties**</b> |                  |                  |                     |      |
| <b>Mode</b>                             | <b>Fast-axis</b> | <b>Slow-axis</b> | <b>Polarization</b> |      |
| TE00                                    | ~ 70 deg         | 20 deg           | TE                  |      |

**\*Exceeding maximum operating ratings can lead to permanent damage to the device! This can adversely affect device performance or lead to complete failure.**

\*\* Divergence angle values indicate FWHM of the full far-field divergence angle. Beam profile and M2 measurements are carried out in accordance to ISO-11146 standard.

Typical characteristics: C-mount package

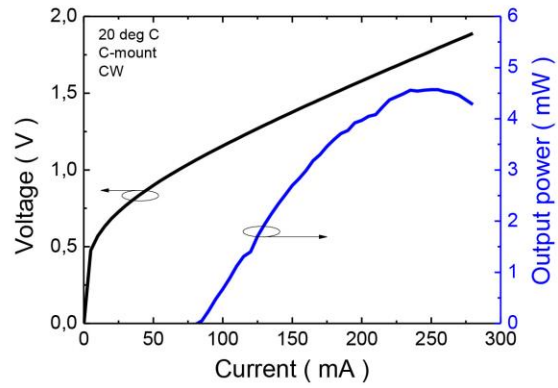


Fig. 1. Typical  $I$ - $V$  characteristics for a 1.1 mm x 0.003 mm laser diode on a C-mount at 20 deg. C. Operation mode is CW.

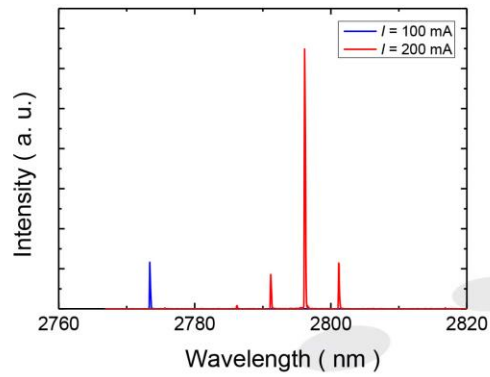


Fig. 2. Typical emission spectrum of TE00 single-spatial mode laser diode at different drive currents. Heatsink temperature is 20 deg C.

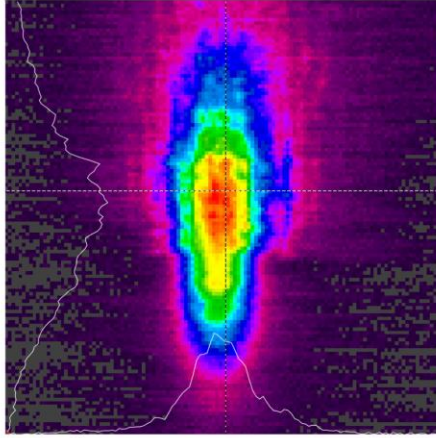


Fig. 3. Measured beam profile. Drive current is 240 mA. Heatsink temperature is 20 deg C.