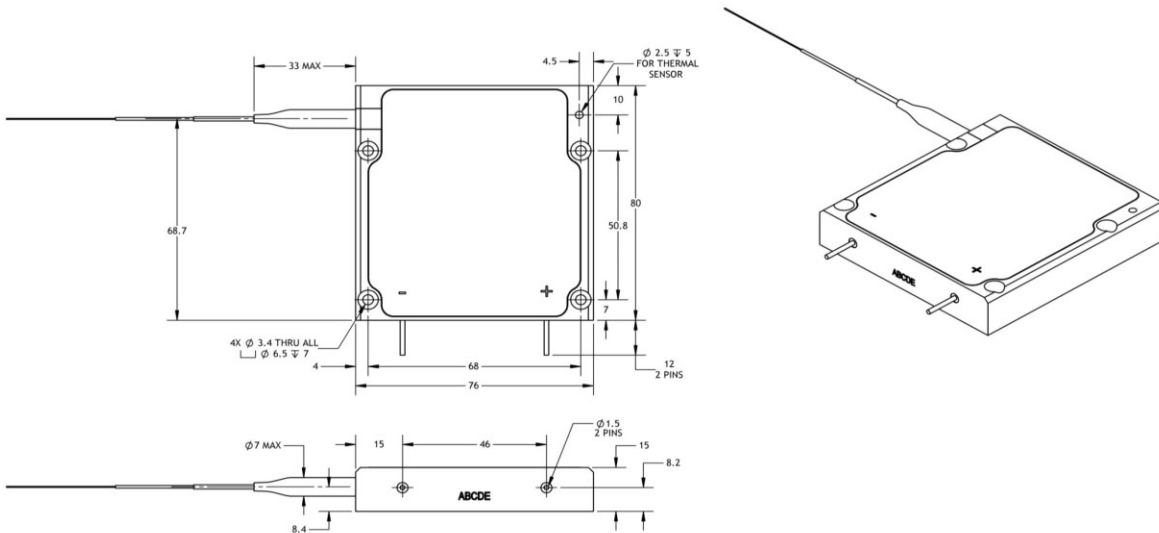


**Item Description** e12-12-140-0976-1-200-0.22-SI-FPT-2.0-HT-VBG  
**Model** e12.1400976200

**ECCN:** 6A005.d.1.b.1<sup>4</sup>

|  | Units   | Lower Spec | Typical                         | Upper Spec |
|--|---------|------------|---------------------------------|------------|
| <b>Optical</b>                                       |         |            |                                 |            |
| CW Output Power (in fiber)                           | W       |            | 140                             |            |
| CW Output Power (as measured)                        | W       | 121        | 135                             |            |
| Wavelength Peak                                      | nm      | 975.0      | 976.0                           | 977.0      |
| Spectral Width (FWHM)                                | nm      |            |                                 | 1.0        |
| Power within 0.14 NA                                 | %       |            | 95                              |            |
| Fiber Core / Clad Diameter                           | µm      |            | 200 / 220                       |            |
| Fiber NA / Index Type                                | -       |            | 0.22 NA / Step Index            |            |
| <b>Electrical</b>                                    |         |            |                                 |            |
| Electrical-to-Optical Efficiency                     | %       |            | 38                              |            |
| Threshold Current                                    | A       |            | 0.8                             |            |
| Operating Current                                    | A       |            | 17.0                            | 17.0       |
| Operating Voltage                                    | V       |            | 21.4                            | 22.5       |
| Wavelength Stabilized Operating Current <sup>5</sup> | A       | 15.0       |                                 | 20.0       |
| <b>Mechanical</b>                                    |         |            |                                 |            |
| Mass   | g       |            | 440                             |            |
| Fiber Length   | m       | 1.5        | 2                               |            |
| Active Fiber Bend Radius                             | mm      | 35         |                                 |            |
| Fiber Jacketing                                      | -       |            | 900 µm Hytrel Loose Tube Buffer |            |
| Fiber Termination                                    | -       |            | FPT                             |            |
| <b>Thermal</b>                                       |         |            |                                 |            |
| Thermal Resistance                                   | °C / W  |            | 0.3                             |            |
| Waste Heat   | W       |            | 224                             |            |
| Operating (Housing) Temperature <sup>2,3</sup>       | °C      |            | +30                             |            |
| Wavelength Temperature Coefficient                   | nm / °C |            | 0.01                            |            |

### Outline Drawing (Package Dimension 80 x 76 x 15 mm)



### Notes

- Production specification shown are for beginning of life performance. End of life operating current (Iop) is 120% beginning of life Iop.
- A non-condensing environment is required for operation and storage. Storage conditions are from -20 to +70 °C with relative humidity between 5 to 85 %.
- Operating temperature defined by the package housing. Acceptable operating range is 20 - 35C, but performance may vary.
- Export Control Classification Number (ECCN) as defined by the Export Administration Regulations (EAR)
- Wavelength stabilized to >90 % power in band of 974.5 nm to 977.5 nm

This product is not certified in accordance with IEC 60825-1 or 21CFR1040.10/21CFR1040.11 and is solely intended to be integrated into a laser product certified by the Purchaser. The Purchaser acknowledges that their product (incorporating the nLIGHT laser product) must comply with the applicable regulations before it can be sold.



**Notice**  
 nLIGHT continually improves its products to provide customers with outstanding quality and reliability, therefore may change certain specifications and product descriptions at any time, without notice. Additionally, nLIGHT offers a limited warranty to ensure customer satisfaction. For complete details, please contact an nLIGHT sales representative.



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