element® e24i

Fiber-Coupled Semiconductor Laser



Item Number: 1130065

120W, 793nm, 105µm

| 12011, 100mm, 100pm | | | item itamber : 1100000 | |
|--|---------|---|------------------------|---------|
| | Unit | Minimum | Typical | Maximum |
| Optical Specifications | | | | |
| CW Output Power (in fiber) ⁴ | W | 107 | 120 | |
| Wavelength Centroid | nm | 790.0 | 793.0 | 796.0 |
| Spectral Width (FWHM) | nm | | 1.8 | 4.0 |
| NA within 95% Power Enclosure | - | | 0.18 | |
| Fiber Core / Clad Diameter | μm | | 105 / 125 | |
| Fiber NA / Index Type / Cladding Type | - | 0.22 NA / Step Index / Single | | |
| Back Reflection Isolation 1850 - 2100nm | dB | 15 | | |
| Electrical Specifications | | | | |
| Electrical-to-Optical Efficiency | % | | 41 | |
| Threshold Current | А | | 1.3 | |
| Operating Current | А | | 7.0 | 7.0 |
| Operating Voltage | V | | 41.7 | 42.7 |
| Thermal Specifications | | | | |
| Operating (Housing) Temperature ³ | °C | | +30 | |
| Storage Temperature ³ | °C | -25 | | 70 |
| Wavelength Temperature Coefficient | nm / °C | | 0.28 | |
| Wavelength Current Coefficient | nm / A | | 0.5 | |
| Mechanical Specifications | | | | |
| Mass | g | | 507 | |
| Fiber Length | m | 2.0 | 2.5 | |
| Active Fiber Bend Radius | mm | 25 | | |
| Product Information | | | | |
| Item Description | - | e24i-24-120-0793-3-105-0.22-SI-FPT-2.5-HT | | |
| Fiber Jacketing | - | 900 μm Hytrel Tubing | | |
| Fiber Termination | - | FPT | | |
| Export Control Classification Number (ECCN) | - | EAR99 | | |

Notes

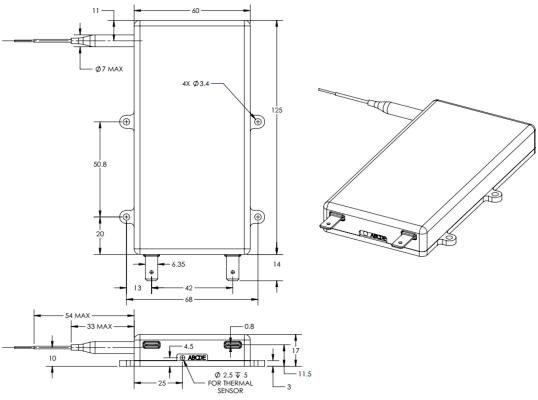
- ${\small 1\ \ Product\ image\ not\ necessarily\ representative\ of\ exact\ appearance.}\\$
- 2 Production specifications shown are for beginning of life performance at the typical operating temperature. End of life operating current (lop) is 110% beginning of life lop.
- $3\ \ \text{A non-condensing environment with relative humidity between 5-85\% is required for operation and storage.}$
- 4 The CW Output Power (in-fiber) specified is 3.5% higher than the as-measured values to account for Fresnel loss that wouldn't be present in the intended spliced use condition.



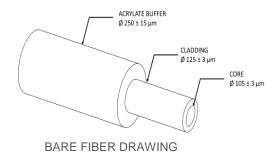
element e24i

900 µm Hytrel Tubing Bare fiber pigtail

Mechanical Drawings



ALL DIMENSIONS IN mm WITH ±0.25mm TOLERANCE.







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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 nLIGHT laser product) must comply with the applicable regulations before it can be sold.

