

## 1490 nm laser diode - DFB

Model 1 : >10 mW / singlemode fiber / 14 pin Butterfly with isolator / SMF or PMF

Reference: 1490LD-1-0-0-1 or 2 (SMF or PMF)

Technology : DFB\*

| SPECIFICATIONS  | Unit                       | Min           | Typ    | Maximum      |
|---|----------------------------|---------------|--------|--------------|
| Output Power (CW mode)  | mW                         | 10            |        |              |
| Output Power (Pulse mode)   | mW                         |               | 20     |              |
| Center Wavelength (CW)**  | nm                         | 1485          | 1490** | 1495         |
| Isolator<br>(Note : contact us for special version with no isolator or double stage isolator) | dB                         |               | 25     |              |
| Spectral Width (FWHM)   | MHz                        |               | 0.5    | 2            |
| Threshold Current   | mA                         |               | 8      | 20           |
| Operating Current   | mA                         |               | 60     | 70           |
| Operation Voltage   | V                          |               | 1.6    | 1.8          |
| Wavelength shift w Temperature  | nm/°C                      |               | 0.08   |              |
| Wavelength shift w Current  | nm/mA                      |               | 0.003  |              |
| Side mode suppression ratio   | dB                         | 35            | 50     |              |
| Internal Photodiode Responsivity  | mA/W                       | 5             |        |              |
| Internal Photodiode Dark Current  | nA                         |               |        | 500          |
| TEC current (-5/60°C)   | A                          |               |        | 1            |
| TEC Voltage (-5/60°C)   | V                          |               |        | 1.5          |
| Internal thermistor (25°C)  | kΩ                         | 9.5           | 10     | 10.5         |
| Fiber type  | SMF28/PM1550 or equivalent |               |        |              |
| Coating diameter  | μm                         |               | 900    |              |
| Fiber bend radius   | mm                         |               |        | 30           |
| Storage case temperature  | °C                         | -40 (abs min) |        | 70 (abs max) |
| Case operating temperature  | °C                         | -20           |        | 60           |
| Lead soldering temperature  | °C                         |               | 260    | 300          |
| Laser diode reverse voltage   | V                          |               |        | 15           |
| Butterfly pin configuration***  | Type-1***                  |               |        |              |
| Pigtail termination   | FC/APC connector           |               |        |              |
| Polarization state (PM version)   | Aligned to the slow axis   |               |        |              |

\*: See our tutorial : [fiber coupled laser diode](#)

\*\* : Possibility to specify a precise wavelength – contact us

\*\*\* : Possibility to request another butterfly pin configuration: Type-2, Type-2 bias-T, Type 2 bias-T anode grounded...

Form factor & laser diode pin configuration (standard 14-pin Butterfly Type-1)\*\*\* :

