

1650 nm laser diode - DFB

Model 1 : >10 mW / singlemode fiber / 14 pin Butterfly package

Reference: 1650LD-1-0-0

Technology : DFB*

| SPECIFICATIONS | Unit | Min | Typ | Maximum |
|--------------------------------------|----------------------------|---------------|-------|--------------|
| Output Power (CW mode) | mW | 10 | | |
| Output Power (Pulse mode) | mW | | 20 | |
| Center Wavelength (CW) | nm | 1645 | 1650 | 1655 |
| Spectral Width (FWHM) | kHz | | 160 | 200 |
| Threshold Current | mA | | 5 | 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) | kOhm | 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 |
| Pigtail termination | FC/APC connector | | | |
| Polarization state (PM version only) | Aligned to the slow axis | | | |

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

Form factor & Laser diode pinning (standard 14-pin Butterfly Type-1) :

