

## 1310 nm laser diode- DFB- 300mW

Model 5a: 300 mW / singlemode fiber / 14 pin Butterfly with isolator / SMF or PMF

Reference: 1310LD-5a-0-0

(-ø or 0 or 1: SMF; -2: PMF)

Technology: DFB\*

| SPECIFICATIONS   | Unit  | Min           | Typ    | Maximum      |
|--|---|---------------|--------|--------------|
| Output Power (CW mode)   | mW  | 250           | 280    |              |
| Output Power (Pulse mode)  | mW  |               | >300   |              |
| Center Wavelength (CW)**   | nm  | 1308          | 1310** | 1313         |
| Isolator<br>(Contact us for special version with no isolator or double stage isolator) | dB  |               | 25     |              |
| Spectral Width (FWHM)  | KHz   |               | 200    | 500***       |
| Threshold Current  | mA  |               | 20     | 50           |
| Operating Current  | mA  |               | 900    | 1200         |
| Operation Voltage  | V   |               | 2.8    | 3.3          |
| 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   |               |        | 1.5          |
| TEC Voltage (-5/60°C)  | V   |               |        | 2.0          |
| Internal thermistor (25°C)   | kΩ  | 9.5           | 10     | 10.5         |
| Fiber type   | SMF28-e/ultra or equivalent (PM version: PM1300 or eq.) |               |        |              |
| 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

\*\*\* : With a relevant ultra-low noise driver – Phase noise measurement method

\*\*\*\* : 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) \*\*\* :

