

## 1085 nm laser diode

Model 2: 70mW / singlemode fiber / 14 pin Butterfly / SMF or PMF  
with mode-hop free continuous tuning

Reference: 1085LD-2-0-0 (-1: SMF; -2: PMF)

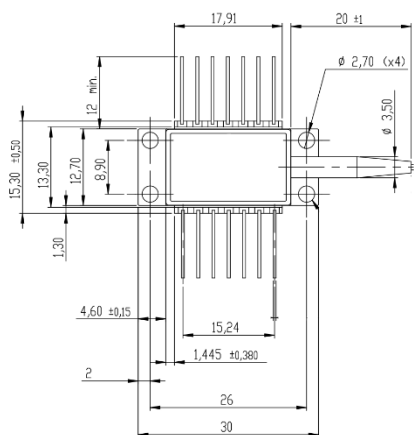
Technology: DFB\*

| SPECIFICATIONS                         | Unit                     | Min  | Typ    | Maximum |
|----------------------------------------|--------------------------|------|--------|---------|
| Output Power (CW mode)                 | mW                       | 50   | 70     |         |
| Center Wavelength**                    | nm                       | 1084 | 1085   | 1086    |
| Threshold Current                      | mA                       |      | 30     | 80      |
| Operating Current (CW mode)            | mA                       |      | 220    | 280     |
| Operating Voltage                      | V                        |      | 1.7    | 2.5     |
| Wavelength shift w Temperature         | nm/°C                    |      | 0.10   |         |
| Wavelength shift w Current             | nm/mA                    |      | 0.0015 |         |
| Internal Photodiode Responsivity       | mA/W                     |      | 0.3    |         |
| Internal Photodiode Current            | μA                       |      | 25     |         |
| Side-Mode Suppression Ratio            | dB                       | 40   | 55     |         |
| Polarization Extinction Ratio          | dB                       | 15   | 18     |         |
| TEC Current                            | A                        |      |        | 3.0     |
| TEC Voltage                            | V                        |      |        | 4.0     |
| Internal thermistor (25°C)             | kΩ                       | 9.9  | 10     | 10.1    |
| Storage temperature                    | °C                       | -40  |        | 85      |
| Operating temperature                  | °C                       | 0    |        | 70      |
| Pin soldering temperature (max 10 sec) | °C                       |      |        | 300     |
| Laser diode reverse voltage            | V                        |      |        | 2       |
| Butterfly pin configuration            | Type-1                   |      |        |         |
| Fiber type<br>(PM version)             | HI1060<br>(PM980)        |      |        |         |
| Pigtail termination                    | FC/APC                   |      |        |         |
| Polarization state (PM version)        | Aligned to the slow axis |      |        |         |

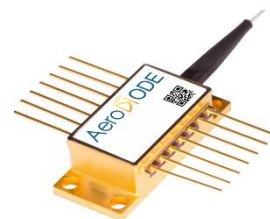
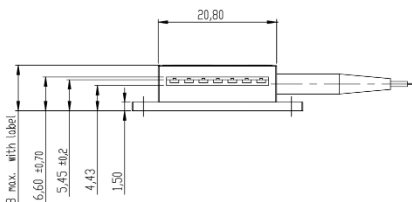
\*: See our tutorial: [fiber coupled laser diode](#)

\*\*: Possibility to target a special wavelength

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



Dimensions are in mm.



| PIN | FUNCTION           | PIN | FUNCTION       |
|-----|--------------------|-----|----------------|
| 1   | TEC (+)            | 8   | NC             |
| 2   | Thermistor         | 9   | NC             |
| 3   | Monitor PD Anode   | 10  | LD Anode (+)   |
| 4   | Monitor PD Cathode | 11  | LD Cathode (-) |
| 5   | Thermistor         | 12  | NC             |
| 6   | NC                 | 13  | Ground         |
| 7   | NC                 | 14  | TEC (-)        |