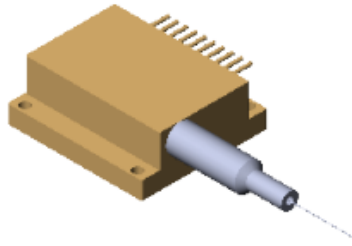


SP series Uncooled Multiwavelength Multimode Laser Diode Module with Red Aiming Beam

TY-808-1060+/-10NM-8+15.0W-25C-400-0.22NA-SP



SkyEra delivers TY-808-1060+/-10NM-8+15.0W-25C-400-0.22NA-SP Single-mode semiconductor laser diode module series employing professional coupling technology, that enjoy multiple advantages, e.g., compact design, stable output power, high power, high efficiency and small dimension.

The performance and aging tests have been performed upon the production line to guarantee reliable, stable and long lifetime of products. To provide customers with high-quality, high cost performance products is the company's goal.

Specification:

Functional parameters are tested on condition that the heat sink temperature is 25 degree, contact resistance of the component and the heat sink is smaller than $1\text{CM}^2 \text{ K/W}$.

| Parameter | Min | Typ | Max | Unit | Conditions |
|----------------------------------|------|--------|------|-------|----------------|
| Output Power (CW)-LD1 | - | 8 | - | W | |
| Output Power (CW)-LD2 | - | 15 | - | W | |
| Centre Wavelength-LD1 | 798 | 808 | 818 | nm | |
| Centre Wavelength-LD2 | 1050 | 1060 | 1070 | nm | |
| Threshold Current-LD1 | - | 1.5 | 2.0 | A | |
| Operating Current-LD1 | - | 10.0 | 12.0 | A | |
| Operating Voltage-LD1 | - | 1.8 | 2.0 | V | |
| Threshold Current-LD2 | - | 0.5 | 0.9 | A | |
| Operating Current-LD2 | - | 11.0 | 12.0 | A | |
| Operating Voltage-LD2 | - | 3.5 | 3.8 | V | |
| Wavelength shift vs. Temperature | - | 0.35 | - | nm/°C | |
| Slop Efficiency | - | 0.8 | - | W/A | |
| Storage Temperature | -30 | 25 | 70 | °C | Non-Condensing |
| Operating Temperature | 15 | 25 | 55 | °C | |
| Fiber Bend Radius | 50 | - | - | mm | |
| Core Diameter | - | 400 | - | μm | |
| Aiming Beam-Red-LD3 | - | 1.2 | 1.4 | A | |
| Aiming Beam-Red-LD3 | - | 2.5 | 2.8 | V | |
| Aiming Beam-Red-LD3 | - | 0.5 | - | W | |
| Numeric Aperture | 0.2 | 0.22 | 0.24 | - | |
| Fiber length | 0.9 | 1.5 | - | M | |
| Protection Tube | 0.9 | - | 1.5 | mm | |
| Fiber Connector | - | SMA905 | - | - | |

Key Parameters:

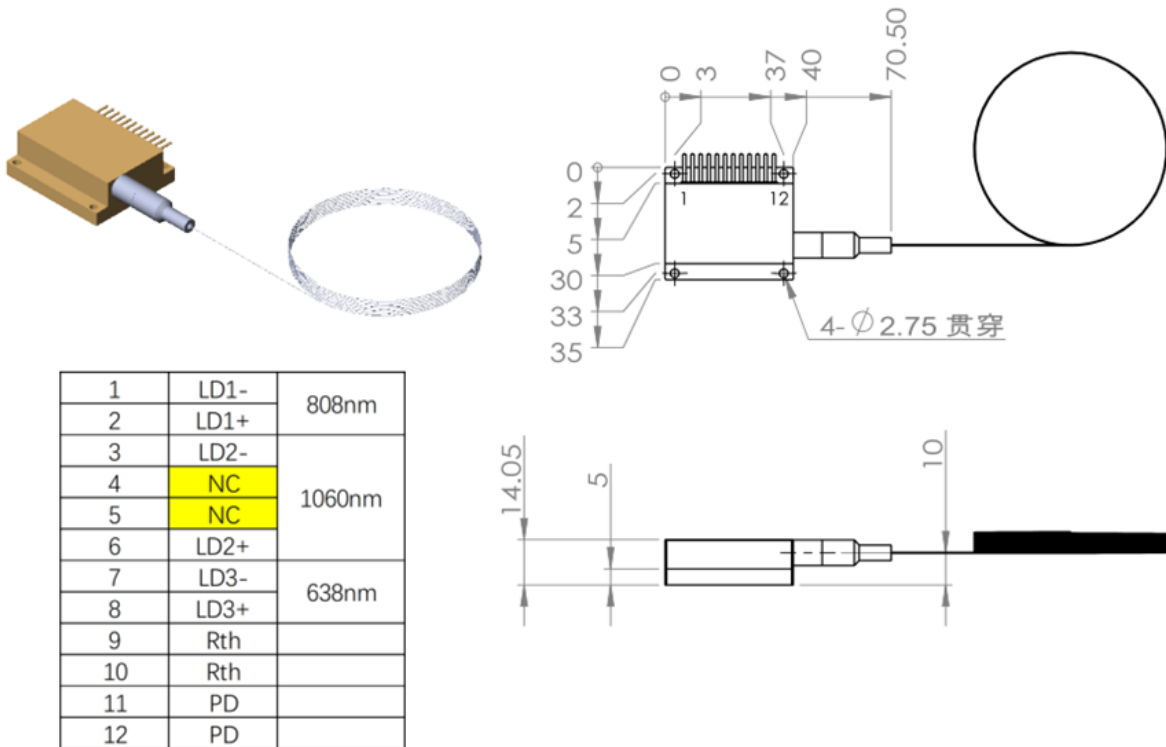
- Based on single fire spot laser module
- High output power 8+15W
- High stability
- 0.22NA 400μm core multimode fiber
- Parallel weld 2-Pin sealed package
- Standard central wavelength
808nm,1060nm
- RoHS compliance
- Red Aiming Beam

Application:

- Medical cosmetology
- Tin Soldering

2. Dimension Diagram

Unit:MM The tolerance: $\pm 0.5\text{mm}$



3. Instructions

- Avoid eyes or skin exposure to direct or scattered radiation;
- ESD protection is required for transportation, storage and operation; short-circuit protection between pins is required for transportation and storage.
- Please connect pins by solder when operating current is over 6A; solder point should be close to the root of pins with a max soldering temperature at 260°C and a duration less than 10 seconds ;
- Drive constant current power supply by laser and avoid surge while working;
- Operate under rated current and rated power;
- Good heat dissipation is required;
- Operating temperature is $15^{\circ}\text{C}\sim 55^{\circ}\text{C}$;
- Storage temperature is $-30^{\circ}\text{C}\sim +70^{\circ}\text{C}$.

