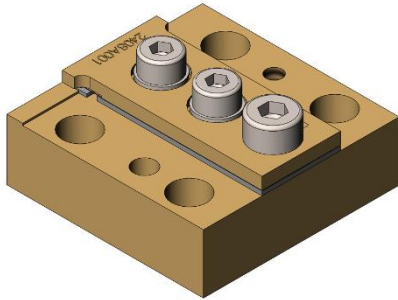


80W 808nm Uncooled Single Bar Laser Diode Module

TY-808NM+/-03NM-80.0W-25C-CS



SkyEra delivers TY-808NM+/-03NM-80.0W-25C-CS single bar diode lasers, employing AuSn bonding technology with multiple advantages of low smile, stable output power, high power, high efficiency, long lifetime and high compatibility, and are widely applied in the market.

The performance and aging tests have been performed upon the production line to ensure reliable, stable and long lifetime of products.

To provide customers with high-quality, high cost performance products is the company's goal.

Key Parameters:

- Single Bar sealed package
- High output power 80W
- High stability
- Long lifetime
- Low smile
- AuSn bonding
- RoHS compliance

Application:

- Medical
- Printing
- Industry
- Pumping

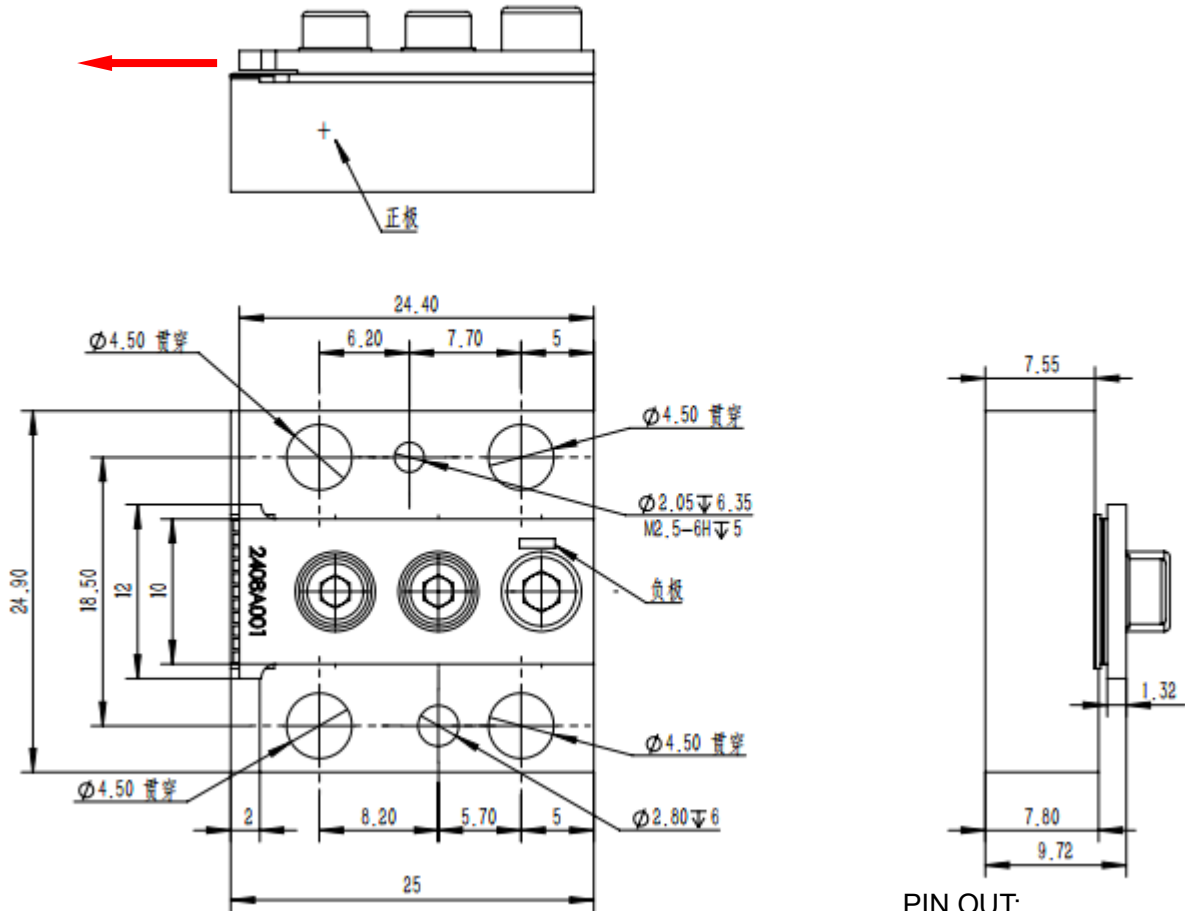
Specification:

Functional parameters are tested at the temperature of the heat sink is 25 degree, contact resistance of the component and heat sink is less than 1 CM² K/W. Reduced lifetime if used above nominal operating conditions. A non-condensing environment is required for storage and operation below the ambient dew point.

| Parameters | Min | Typ | | | | Max | Unit | Conditions |
|----------------------------------|-----|-------|-------|-------|-------|-----|-------|------------|
| Output Power | - | 40 | 50 | 60 | 80 | - | W | |
| Center Wavelength | - | | | | | - | - | |
| TY-CS | - | 808±3 | 808±3 | 808±3 | 808±3 | - | nm | |
| Spectral Width(FWHM) | - | 3 | 3 | 3 | 3 | - | nm | |
| Spectral Width (90%) | - | 5 | 5 | 5 | 5 | - | nm | |
| Fax-Axis Divergence(FWHM) | - | 31 | 31 | 31 | 30 | - | ° | |
| Slow-Axis Divergence (FWHM) | - | 8 | 8 | 8 | 8 | - | ° | |
| Pitch | - | 500 | 500 | 500 | 500 | - | μm | |
| Emitter Width | - | 150 | 150 | 140 | 140 | - | μm | |
| Wavelength Shift vs. Temperature | - | 0.28 | 0.28 | 0.28 | 0.28 | - | nm/°C | |
| Polarization Mode | - | TE | TE | TE | TE | - | - | |
| Threshold Current | - | 8.0 | 10.0 | 12.0 | 12.0 | - | A | |
| Operating Current | - | 40.0 | 50.0 | 62.0 | 82.0 | - | A | |
| Operating Voltage | - | 1.9 | 1.9 | 1.9 | 1.9 | 2.0 | V | |
| Power Conversion Efficiency | - | 53 | 55 | 54 | 54 | - | % | |
| Slope Efficiency | - | 1.15 | 1.15 | 1.14 | 1.14 | - | W/A | |
| Storage Temperature | 0 | - | | | | 55 | °C | |
| Operating Temperature | 15 | - | | | | 35 | °C | |
| Recommended Heatsink Capacity | - | 100 | | | | - | W | |

2. Dimension Diagram

Unit: MM



PIN OUT:

| PIN | Description |
|-----|-------------|
| + | LD+ |
| - | LD- |

3. Instructions

- Avoid eyes or skin exposure to direct or scattered radiation;
- ESD protection is required for transportation, storage and operation;
- Max soldering temperature is 260°C;
- Drive constant current power supply by laser and avoid surge while working;
- Operate under rated current and rated power;
- Good heat dissipation is required, heat dissipating capacity should be greater than output power;
- Operating temperature is 15°C~35°C;
- Storage temperature is 0°C~+55°C.

