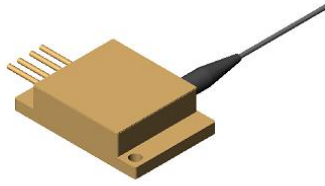


SP2 series Uncooled Multiwavelength Multimode Laser Diode Module

TY-SM1064-MM915-10-125-SP2-02



SkyEra delivers TY-SM1064-MM915-10-125-SP2-02 multimode 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 1CM² K/W.

Key Parameters:

- Based on single fire spot laser module
- High output power 0.4+10W
- High stability
- 10μm-125μm double cladding fiber
- Parallel weld 2-Pin sealed package
- Standard central wavelength
1064nm,915nm
- RoHS compliance
- High brightness

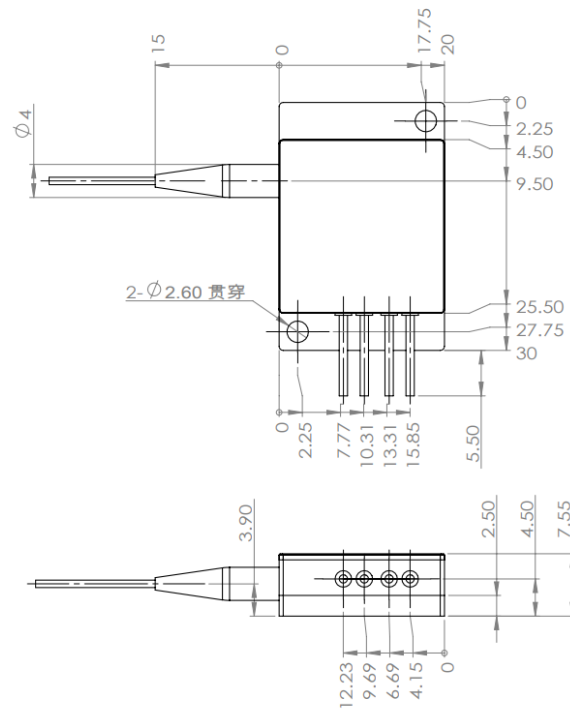
Application:

- special light source
- special Pump

Parameter	Min	Typ	Max	Unit	Conditions
Output Power (CW)-LD1	-	400	-	mW	
Output Power (CW)-LD2	-	10	-	W	
Centre Wavelength-LD1	1061	1064	1067	nm	
Centre Wavelength-LD2	905	915	925	nm	
Threshold Current-LD1	-	60	100	mA	
Operating Current-LD1	-	500	600	A	
Operating Voltage-LD1	-	1.6	1.7	V	
Conversion Efficiency-LD1		50		%	
Threshold Current-LD2	-	0.5	0.9	A	
Operating Current-LD2	-	11.5	13	A	
Operating Voltage-LD2	-	1.7	2	V	
Conversion Efficiency-LD2		50		%	
Wavelength shift vs. Temperature	-	0.3	-	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	37.5	-	-	mm	
Core Diameter	-	10	-	μm	
Numeric Aperture		0.08	-	-	
Cladding Diameter		125		μm	
Cladding Numeric Aperture		0.46		-	
Fiber length	-	0.9	-	M	
Protection Tube	-	0.9	-	mm	

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 $-30^{\circ}\text{C}\sim +70^{\circ}\text{C}$.

