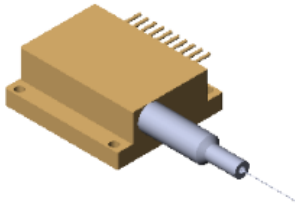


976nm 30W Uncooled Multimode Laser Diode Module with Red Aiming Beam

TY-976+/-10NM-30.0W-25C-400-0.22NA-SP



SkyEra delivers TY-976+/-10NM-30.0W-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 1CM² K/W.

Key Parameters:

- Based on single fire spot laser module
- High output power 30W
- High stability
- 0.22NA 400µm core multimode fiber
- Parallel weld 2-Pin sealed package
- Standard central wavelength 976nm
- RoHS compliance
- Red Aiming Beam

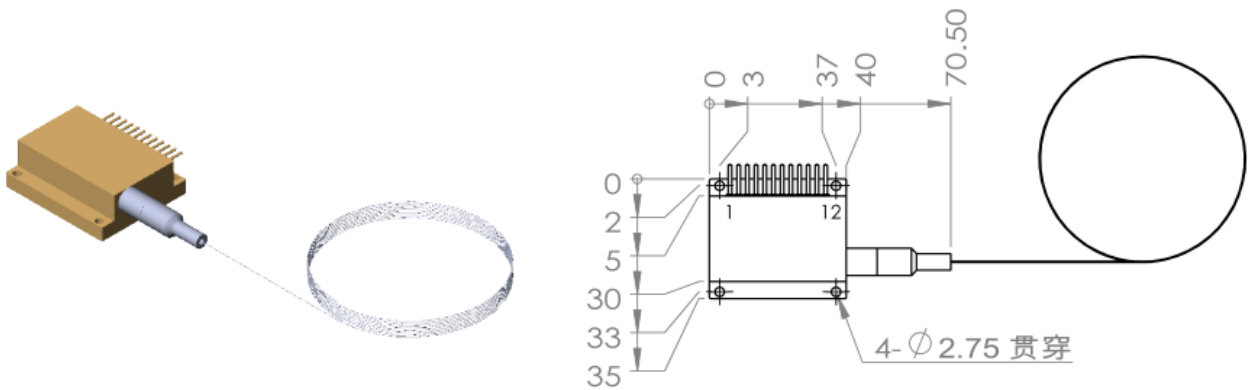
Application:

- Medical cosmetology
- Tin Soldering
- Pump Sources

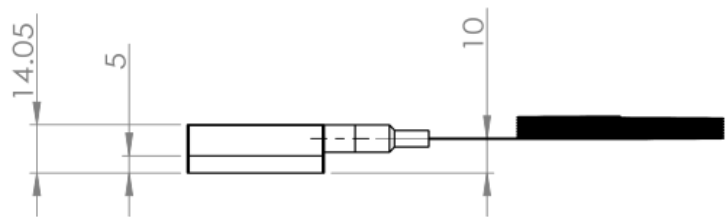
Parameter	Min	Typ	Max	Unit	Conditions
Output Power (CW)	-	30	-	W	
Output Power (QCW)	-	1.5	-	W	f:100HZ, Duty Cycle:5%
Centre Wavelength	-	-	-	nm	
SP	966	976	986		
Spectral Width (FWHM)	-	4.5	6	nm	
Threshold Current	-	0.6	0.9	A	
Operating Current	-	11.0	13.0	A	
Operating Voltage	-	4.8	5.5	V	
Conversion Efficiency	-	50	-	%	
90% Power	-	0.18	-	NA	
Wavelength shift vs. Temperature	-	0.35	-	nm/°C	
Slop Efficiency	-	2.5	-	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	-	1.2	1.4	A	
Aiming Beam-Red-	-	2.5	2.8	V	
Aiming Beam-Red	-	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	-	-	

2. Dimension Diagram

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



1	LD1-	976nm
2	NC	
3	NC	
4	NC	
5	NC	
6	LD1+	638nm
7	LD2-	
8	LD2+	
9	Rth	
10	Rth	
11	PD	
12	PD	



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°C~55°C;
- Storage temperature is -30°C~+70°C.

