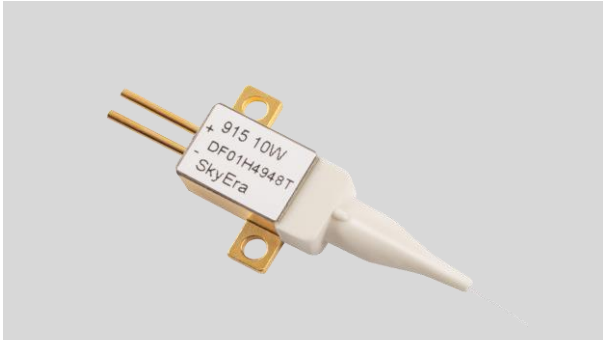


10W 940nm HT Resistance Uncooled Multimode Laser Diode Module

TY-940+/-10NM-10.0W-25C-2PIN-105-0.22NA-HT



SkyEra delivers TY-940+/-10NM-10.0W-25C-2PIN-105-0.22NA-HT diode lasers employing professional coupling technology, that enjoy multiple advantages, e.g., compact design, stable output power, high power, high efficiency and convenient packaging. These laser diode modules can provide solutions for fiber laser applications and direct suppliers.

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 10W
- High stability
- 0.22NA 105µm core multimode fiber
- Parallel weld 2-Pin sealed package
- Standard central wavelength 940nm
- RoHS compliance

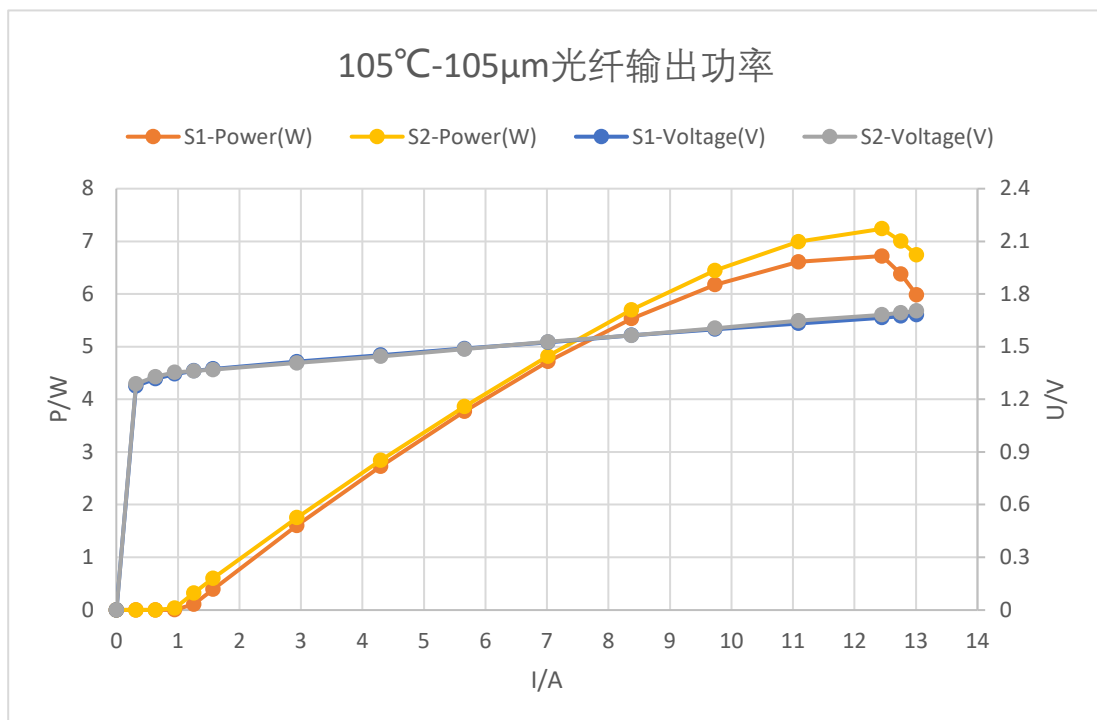
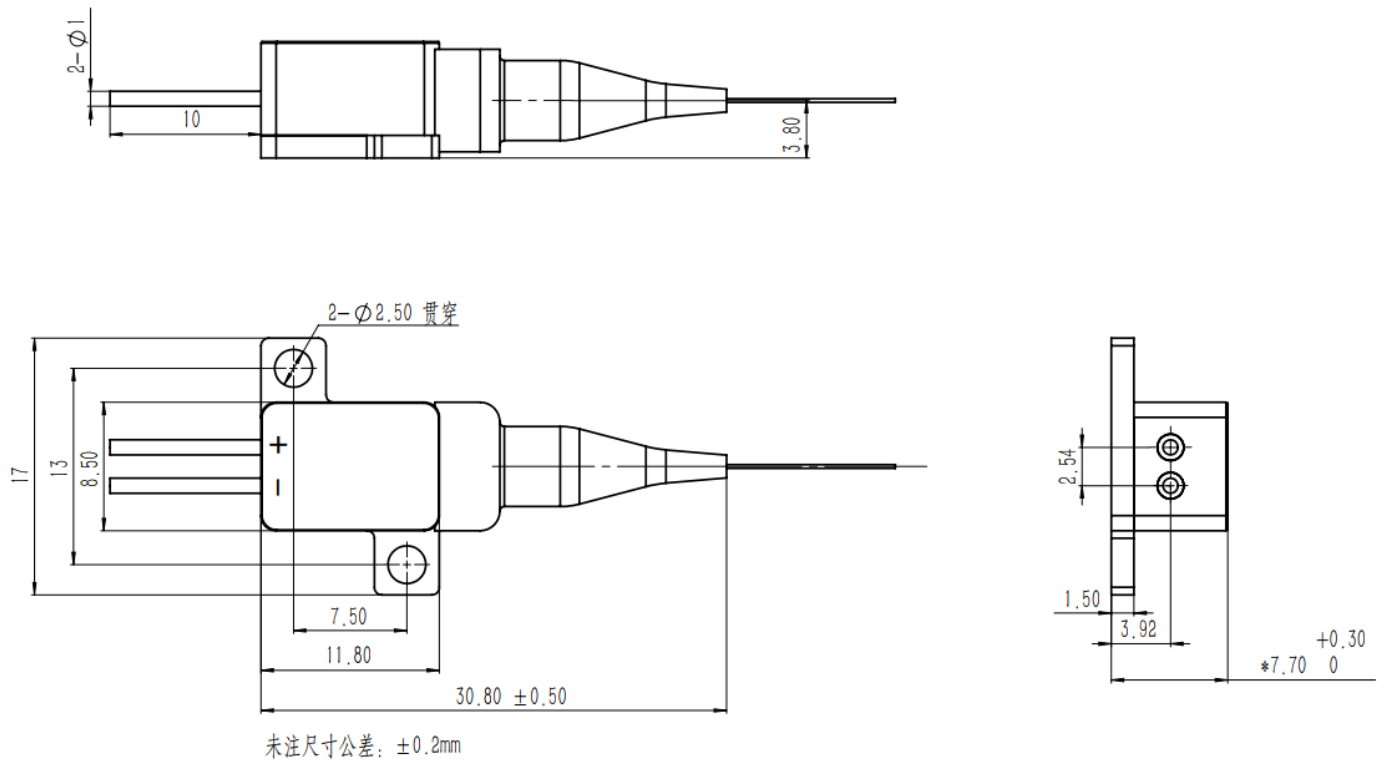
Application:

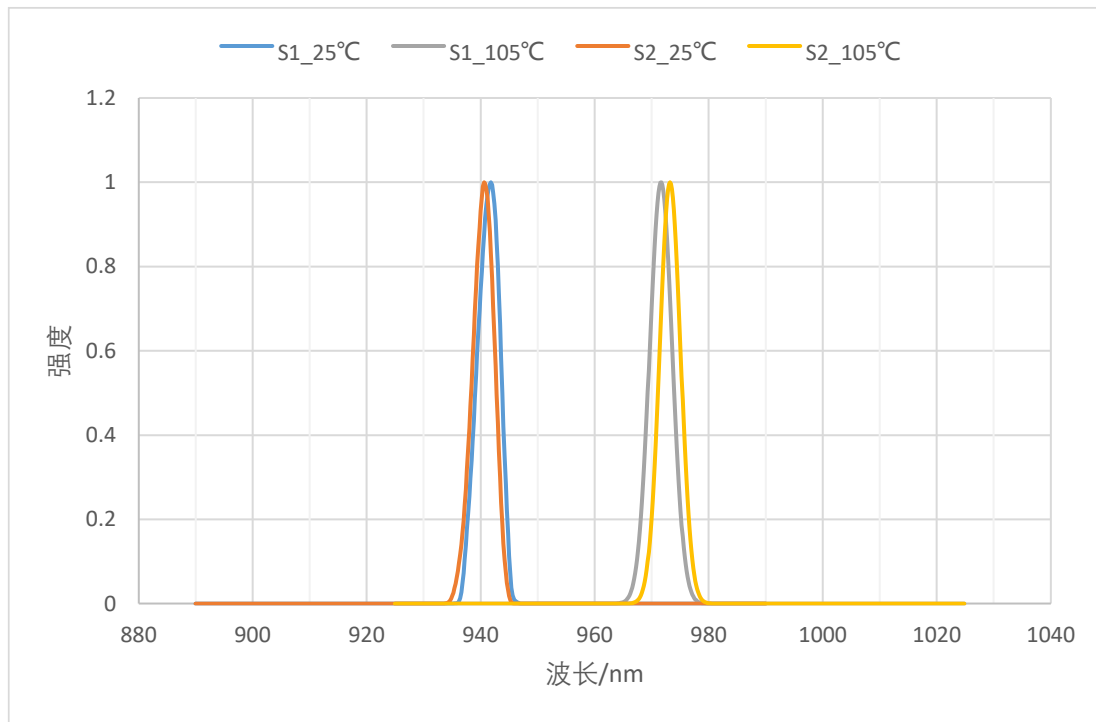
- Extreme environment
- Medical
- Pump source
- Material processing

Parameter	Min	Typ	Max	Unit	Conditions
Output Power	-	10.0W@25°C 8.0W@85°C 5.0W@105°C 3.0W@125°C 1.0W@150°C	-	W	
Centre Wavelength					
-40°C	910	920	930	nm	I _{max} :13A@-40°C
+25°C	930	940	950		I _{max} :13A@+25°C
8.0W@+85°C	955	965	975		I _{max} :12A@+85°C
5.0W@+105°C	970	975	980		I _{max} :8A@+105°C
3.0W@+125°C	970	975	980		I _{max} :6A@+125°C
1.0W@+150°C	975	980	985		I _{max} :4A@+150°C
Spectral Width (FWHM)	-	3.5	7	nm	
Threshold Current	-	0.6	1.0	A	
Operating Current	-	12.0	13.0	A	
Operating Voltage	-	1.7	2.2	V	
Wavelength shift vs. Temperature	-	0.35	-	nm/°C	
Storage Temperature	-40	25	+150	°C	Non-Condensing
Operating Temperature	-40	25	+150	°C	Non-Condensing
Fiber Bend Radius	37.5	-	-	mm	
Core Diameter	102	105	108	µm	
Numeric Aperture	0.2	0.22	0.24	-	

2. Dimension Diagram

Unit: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 -40°C~150°C;
- Storage temperature is -40°C~150°C.

