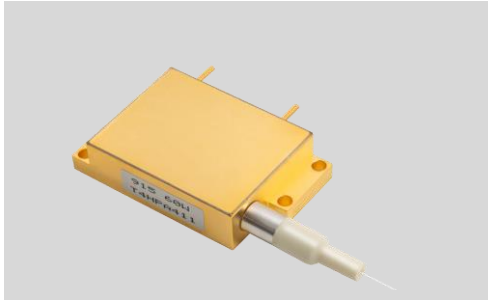


## 976nm 45W DFB Uncooled Multimode Laser Diode Module

TY-975+/-02NM-45.0W-DFB-105-0.22NA-T3S



SkyEra delivers TY-975+/-02NM-45.0W-DFB-105-0.22NA-T3S 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 1CM<sup>2</sup> K/W.

### Key Parameters:

- Based on single fire spot laser module
- High output power 45W
- High stability
- 0.22NA 105μm core multimode fiber
- Parallel weld 2-Pin sealed package
- Standard central wavelength 976nm
- RoHS compliance
- Full current stabilized wavelength

### Application:

- Ultrafast laser pump

Parameter	Min	Typ	Max	Unit	Conditions
Output Power	45	45	-	W	
Centre Wavelength	973	975	977	nm	HR @ 1020-1200>20dB, HR @ 1060-1100>30dB
Spectral Width (FWHM)	-	1.2	1.5	nm	0.5nm DPI, 2~Imax
Threshold Current	-	1.5	-	A	
Operating Current	-	21	23	A	2~Imax
Edge mode SNR	13	15	-	dB	0.5nm DPI, 2~Imax
Operating Voltage	-	5.1	6	V	
Conversion Efficiency	-	45	-	%	
95% Power	-	0.18	-	NA	
Wavelength shift vs. Temperature	-	0.07	-	nm/°C	
Wavelength shift vs. Current		0.1			
Slop Efficiency	-	2.5	-	W/A	
Storage Temperature	-30	25	70	°C	Non-Condensing
Operating Temperature	15	25	55	°C	
Fiber Bend Radius	37.5	-	-	mm	
Buffer Diameter	-	250	-	μm	
Cladding Diameter	-	125	-	μm	
Core Diameter	-	105	-	μm	
Numeric Aperture	0.2	0.22	0.24	-	
Fiber length	0.9	-	-	M	
Fiber Protection Tube	0.9	-	1.5	mm	
Fiber Connector	-	-	-	-	

