



NO.925 Yecheng Road, Jiading Industrial Zone,  
Shanghai, China.

Mail: [info@tulinopto.com](mailto:info@tulinopto.com)

Tele: +8618920821875

# 976 nm 30W Module Specifications

---

TL-976-03036A



Version		Released Date
V1.0		Nov. 2024

Shanghai Tulin Optoelectronic Technology Co., Ltd.

<b>Optical Parameters<sup>1</sup></b>	<b>Unit</b>	<b>Min</b>	<b>Typ</b>	<b>Max</b>
CW Output Power	W		30	
Central Wavelength <sup>2</sup>	nm		976±1	
Spectral Width (FWHM)	nm		0.5	1
NA @ 95% Power	-		0.11	
Locked Current	A	5-IOP		
Fiber Core Diameter	µm	105		
Fiber Cladding Diameter	µm	125		
Fiber NA	-	0.22		
Fiber Length	m	1.5	2.0	
Fiber Connector	-	FC		
Back Reflection Isolation Wavelength	nm	1040		1200
Back Reflection Isolation	dB	30		
<b>Electrical Parameters</b>	<b>Unit</b>	<b>Min</b>	<b>Typ</b>	<b>Max</b>
Conversion Efficiency	%	57		
Threshold Current	A	0.6		
Operating Current <sup>3</sup>	A		11	12
Operating Voltage	V	3.5	4.5	5.5
<b>Thermal Parameters</b>	<b>Unit</b>	<b>Reference value</b>		
Operating Temperature Range <sup>4</sup>	°C	25±3 (Coolant Temperature)		
Storage Temperature Range	°C	-40 ~ 85		
Wavelength Temperature Coefficient	nm/°C	~0.01		
<b>Other Parameters</b>		<b>Min</b>	<b>Typ</b>	<b>Max</b>
Weight	g			
Soldering Temperature	°C			300
Welding Time	Sec			10

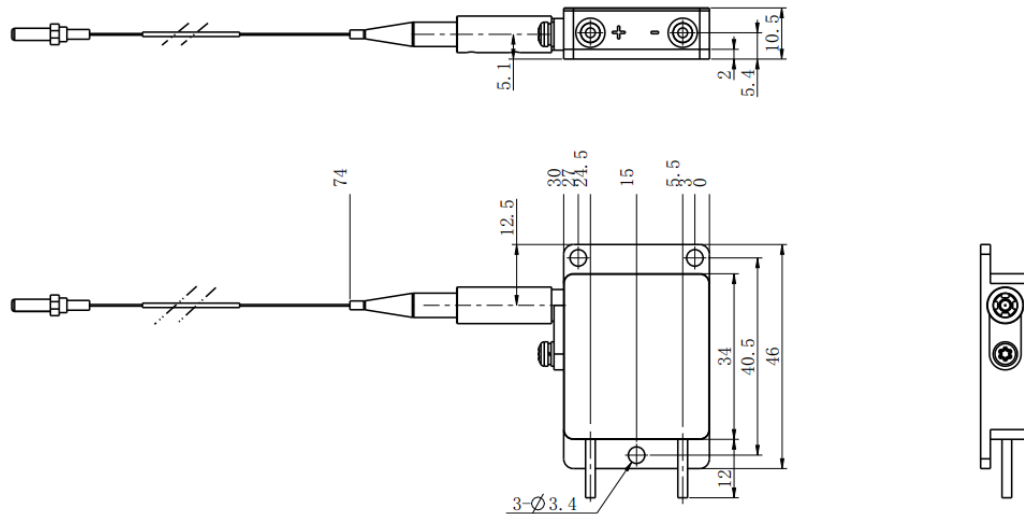
1 Tested at 25°C water-cooled heat sink.

2 Others available upon request.

3 Reduced lifetime if used above nominal operating condition.

4 Laser wavelength would shift when heat sink operating temperature is changed.

## Dimensions:



## Application Notes:

- The laser beam is invisible, please follow the standard safety procedures for IEC Class 4 lasers, avoid eyes exposure to radiation.
- ESD cause diode laser failure, The operator should be trained, wearing ESD grounding straps and the work surface should be grounded. The positive and negative poles shall be connected before the power supply is connected with the laser.
- The current overshoot may damage the laser, and the driving power must be stable without overshoot.

