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# **1064nm-200mW-Module Specifications**

TL-1064-B20391

Version	<b>Released Date</b>
V1.0	Dec. 2024

Shanghai Tulin Optoelectronic Technology Co., Ltd.



## **Specifications:**

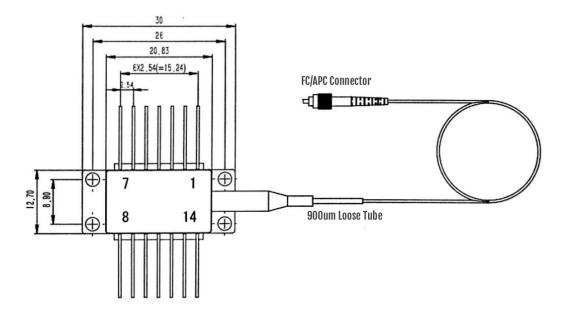
Electrical characteristics ( $T = 25^{\circ}C$ )						
Parameters	Symbol	<b>Test Conditions</b>	Min	Nor	Max	Unit
Threshold current	I <sub>th</sub>	$T_{LD}=25^{\circ}C$	-	45	70	mA
Forward Operating Voltage	V <sub>op</sub>	Po=200mW	-	-	2.1	V
Forward Operating Current	I <sub>op</sub>	Po=200mW	-	370	400	mA
MPD Operating Voltage	$\mathbf{V}_{\mathrm{mon}}$	Po=200mW	-	5	-	V
MPD Responsivity	$I_{mon}/P_{op}$	-	1	-	30	μA/mW
Thermistor BETA Value	β	-	3500	3930	4100	K
Thermistor Current	I <sub>ther</sub>	_	-	-	1	mA

<b>Optical Characteristics</b> (T = 25°C)						
Parameters	Symbol	<b>Test Conditions</b>	Min	Nor	Max	Unit
Center Wavelength	$\lambda_{C}$	$T_{LD}=25^{\circ}C$	1063	1064	1065	nm
Wavelength Tuning Range	Δλ	-	-	2	-	nm
Output Power @400mA	P <sub>P</sub>	$T_{LD}=25^{\circ}C$	200	210	-	mW
Side Mode Suppression Ratio	SMSR	Po=200mW	-	40	-	dB
Polarization Extinction Ratio	PER	Po=200mW	18	20	-	dB
Slope Efficiency	SE	Po=200mW	0.15	0.26	-	W/A
Temperature Wavelength Coefficient	dλ/dT	-	-	0.07	-	nm/°C

Fiber Pigtail Specifications				
Parameter Name	rameter Name Parameters			
Fiber Model	PM980	-		
Tube Type	250μm Bare Fiber + 900μm Loose Tube	-		
Pigtail Length	≥1m	М		
Connector Type	FC/APC	-		



## **Dimensions (mm):**



Pin	Description	Pin	Description
1	TEC (+)	8	NC
2	RT	9	NC
3	PD (Anode)	10	LD (+)
4	PD (Cathode)	11	LD (-)
5	RT	12	NC
6	NC	13	CASE
7	NC	14	TEC (-)



#### **Applications:**

- Scientific Research
- Production Testing
- Laser Sensing
- Laser Seed Source
- Nonlinear Optics Research

#### Notes:

• This device emits high-density laser beams during operation. Do not look directly at the fiber end face, as it may cause eye damage.

• This device is electrostatic sensitive. Strict anti-static protection measures should be followed during packaging, transportation, and usage. Additionally, prevent surge shocks from the power source, as this may cause permanent damage to the device.

• The optical fiber is fragile; do not pull on the fiber. When inserting or removing the device from the socket, avoid pressing or pulling the sleeve at the end of the tube. When handling devices with connectors, hold both the device and the fiber connector at the same time.

• If soldering the pins, the soldering temperature should not exceed 260°C, and the soldering time should not exceed 10 seconds. Special care should be taken to ensure the device is unpowered during the soldering process, and the soldering iron should be properly grounded.



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