



Xi'an Zealchon Electronic Technology Co., Ltd.

# **8W 976nm CW Fiber Coupled Single Emitter Diode Laser**

**Datasheet**

**Sally**

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# 8W 976nm CW Fiber Coupled Single Emitter Diode Laser

## Model 1: FCSE01



### Features

- Long lifetime
- High power
- High coupling efficiency
- Parallel seam sealing

### Applications

- Industry
- Pumping
- Printing
- Medical
- Scientific Research

## Specifications

<b>Optical Characteristics</b>	
Center Wavelength $\lambda$	976nm
Wavelength Tolerance	$\pm 5$ nm
Output Power	8W
Spectral Width FWHM	$\leq 4$
Spectral Width FW90%E	$\leq 6$
Wavelength Temp. Coefficient	$\sim 0.34$ nm/ $^{\circ}$ C
<b>Fiber Parameters</b>	
Fiber Numerical Aperture	0.15NA
Fiber Core/Cladding Diameter	105/125 $\mu$ m
Connector Type	SC
Fiber Length	1.5m
<b>Electrical Characteristics</b>	
Operating Current Iop	$\leq 9.2$ A
Threshold Current Ith	$\leq 0.8$ A
Operating Voltage Vop	$\leq 2$ V
Slope Efficiency	$\geq 0.9$ W/A
Power Conversion Efficiency	$\geq 40\%$
<b>Thermal Parameters</b>	
Operating Temperature	15~30 $^{\circ}$ C
Storage Temperature	0~55 $^{\circ}$ C
Recommended Heatsink Capacity	$\geq 20$ W

## Price

<b>FCSE01</b>					
QTY Quantity	10	100	300	500	1000
price(USD)	242/piece	222/piece	206/piece	193/piece	189/piece
power: 100um 8W					

## Model 2: FCSE03



### Features

- Long lifetime
- High power
- High coupling efficiency
- Parallel seam sealing

### Applications

- Pumping
- Medical

## Specifications

<b>Optical Characteristics</b>	
Center Wavelength $\lambda$	976nm
Wavelength Tolerance	$\pm 5\text{nm}$
Output Power	8W
Spectral Width FWHM	$\leq 4$
Spectral Width FW90%E	$\leq 6$
Wavelength Temp. Coefficient	$\sim 0.34\text{nm}/^\circ\text{C}$
<b>Fiber Parameters</b>	
Fiber Numerical Aperture	0.22NA
Fiber Core/Cladding Diameter	200/220 $\mu\text{m}$
Connector Type	SMA905
Fiber Length	1.5m
<b>Electrical Characteristics</b>	
Operating Current $I_{op}$	$\leq 9.2\text{A}$
Threshold Current $I_{th}$	$\leq 0.8\text{A}$
Operating Voltage $V_{op}$	$\leq 2\text{V}$
Slope Efficiency	$\geq 0.9\text{W}/\text{A}$
Power Conversion Efficiency	$\geq 40\%$
<b>PD Parameters</b>	
Operating Current $I_{mo}$	0~2mA
<b>TEC Parameters</b>	
Operating Current $I_t$	3A
Operating Voltage $V_t$	8.5V
<b>Thermistor Parameters</b>	
Thermistor $R_t$ (K $\Omega$ )/ $\beta$ (25 $^\circ\text{C}$ )	10 $\pm$ 0.5%/3862
<b>Aiming Beam Parameters</b>	
Output Power	2mW
Wavelength	650nm
Operating Voltage	2V
Operating Current	<30mA
<b>Thermal Parameters</b>	
Operating Temperature	15~35 $^\circ\text{C}$
Storage Temperature	0~55 $^\circ\text{C}$
Recommended Heatsink Capacity	$\geq 12\text{W}$

## Price

<b>FCSE03</b>				
QTY Quantity	10	100	300	500
price(USD)	455/piece	415/piece	409/piece	387/piece
power: 200um 8W(with 1.5 fiber)				

## Pictures showing





## Application pictures

