



EF635N20FC(USB) Laser Diode Fiber Modules Key features

Description

The EF635N20FC(USB) is a red fiber laser module subassembly without collimated beam. The maximum laser output power is 20.0mW at 638nm.

Features

- Wavelength: $638 \pm 5\text{nm}$
- Optical output power: $\leq 20.0\text{mW}$
- Fiber Core Diameter: $170\mu\text{m}$ (Customer Fiber)
- Low operating current: $< 90\text{mA}$
- Low operating voltage: 5.0 VDC
- Class IIIa laser, CDRH/ROHS compatible
- Static, Surge, Reverse Polarity Protected
- Circuit control: Auto constant current (ACC)
- Operating Temperature: -10 to 50°C

Absolute Maximum Ratings

Parameter	Symbol	Ratings	Unit
Optical Output Power	P_0	≤ 20.0	mW
Operating Temperature	T_{opr}	-10 to +50	$^\circ\text{C}$
Storage Temperature	T_{stg}	-40 to +80	$^\circ\text{C}$
Operating Humidity (none condensing)	RH_{opr}	90	%

Optical and Electrical Characteristics

Parameter	Specifications	Test Conditions
Wavelength	$638 \pm 5\text{nm}$	$T_c = 25^\circ\text{C}$
Output Power	$\leq 20.0\text{mW}$	$T_c = 25^\circ\text{C}$
Laser Modes	Pulse	PWM
Spectral Width	$< 2.0\text{nm}$	$T_c = 25^\circ\text{C}$
Wavelength Shift	0.2nm	$\text{nm}/^\circ\text{C}$
Operating Current	$< 90\text{mA}$	$T_c = 25 \pm 3^\circ\text{C}$
Operating Voltage	5.0 VDC	
CDRH Class	Class IIIa	
MTBF	8000 Hrs.	$T_c = 25 \pm 3^\circ\text{C}$

Fiber Characteristics

Parameter	Specifications
Dimensions	$\varnothing 14(\text{D}) \times 50(\text{L})\text{mm}$
Cable Length	500mm with USB
Fiber Core Diameter	$170\mu\text{m}$ (Customer Fiber)
Fiber Length	Customer Fiber
Numerical Aperture	Customer Fiber
Connector	FC

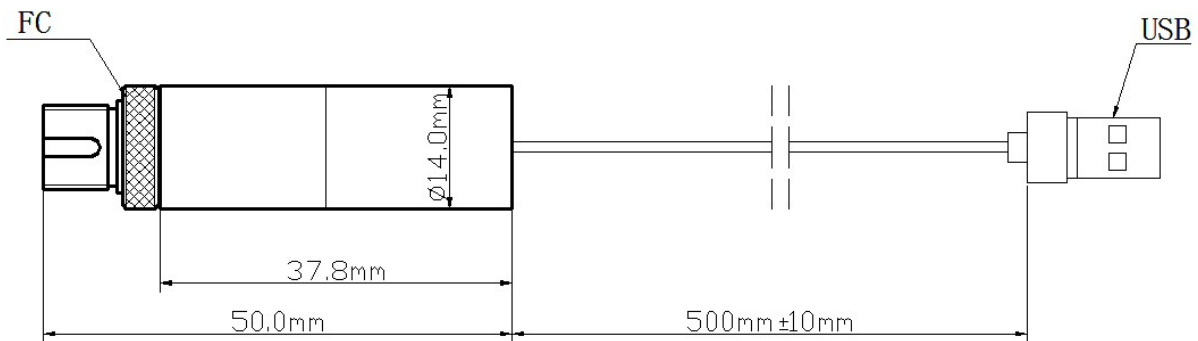
Mechanical Drawing

Pin 1: +5.0VDC

Pin 2: NC

Pin 3: PWM

Pin 4: GND



Caution:

1. The laser light is harmful to human body especially to eye no matter what directly or indirectly.
The laser beam shall be observed or adjusted through infrared camera or equivalent.
2. Design your application so that the product is used within the range in the datasheet.
3. The above product specification are subject to change without notice.

