

FRANKFURT LASER COMPANY

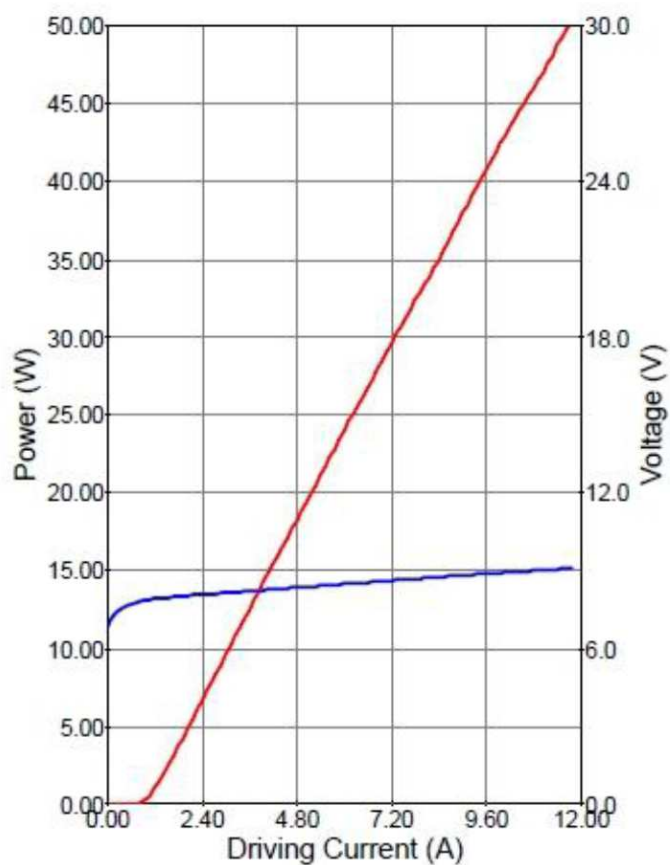
FBLD-976-50.00-FC-VBG

Fiber-coupled Laser Diode

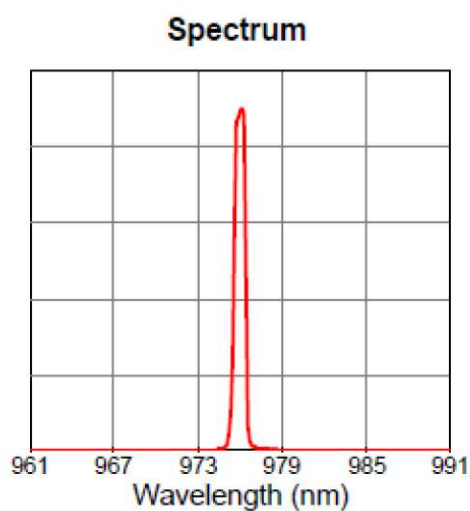
Features: Power output 50W
Fiber core diameter 105µm
NA 0.22
Back-reflection protection coating
Narrow Bandwidth

Optical data	
Output power	50W CW at the fiber end
Center wavelength λ	976nm
Tolerance of λ	$\pm 0.5\text{nm}$
Spectral width (FWHM)	$< 1\text{nm}$
Spectral shift with Temperature	$\sim 0.02\text{nm}/^\circ\text{C}$
Spectral shift with Current	$\sim 0.05\text{nm/A}$
Electrical data	
Threshold current	0.8A
Operation current	11A
Slope efficiency	4.6W/A
Operation voltage	9.5V
Temperature conditions	
Operation temperature	$30 \pm 5^\circ\text{C}$
Storage temperature	$-20 \sim +80^\circ\text{C}$
Fiber data	
Core diameter	105µm
N.A.	0.22
Connector	FC, ST, SMA-905
Other parameters	
Expected lifetime (MTBF)	$> 10000\text{ h}$
Laser head dimensions Fiber and connector not included	$74.0 \times 50.0 \times 15\text{mm}$
Lead soldering temperature	260°C (10sec.)
Back-reflection isolation	
Wavelength bandwidth	1030nm – 1200nm
Isolation	$> 30\text{dB}$

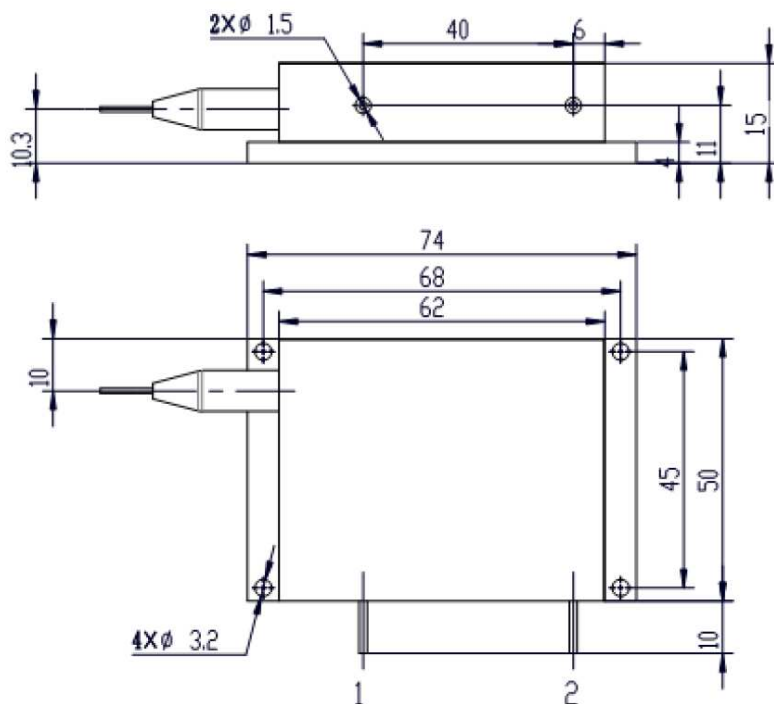
PIV Curve



Typ. spectrum (T=25°C)



Package Dimensions (mm)



Pin	Function
1	LD (+)
2	LD (-)