

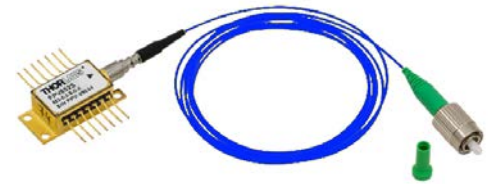
## FPV Fiber-Pigtailed Laser with built in isolator

FPV976P



**S/N: FPV-35414**  
 Wavelength: 976.1nm  
 Fiber Type: PM980XP  
 Test Date: 4/11/2019

Package:976-2-2-Y-P-A  
 Connector: FC/APC  
 Tested By: Paya



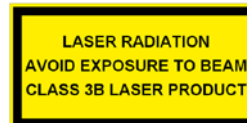
QA: Pass

### Summary of Test Data ( CW )

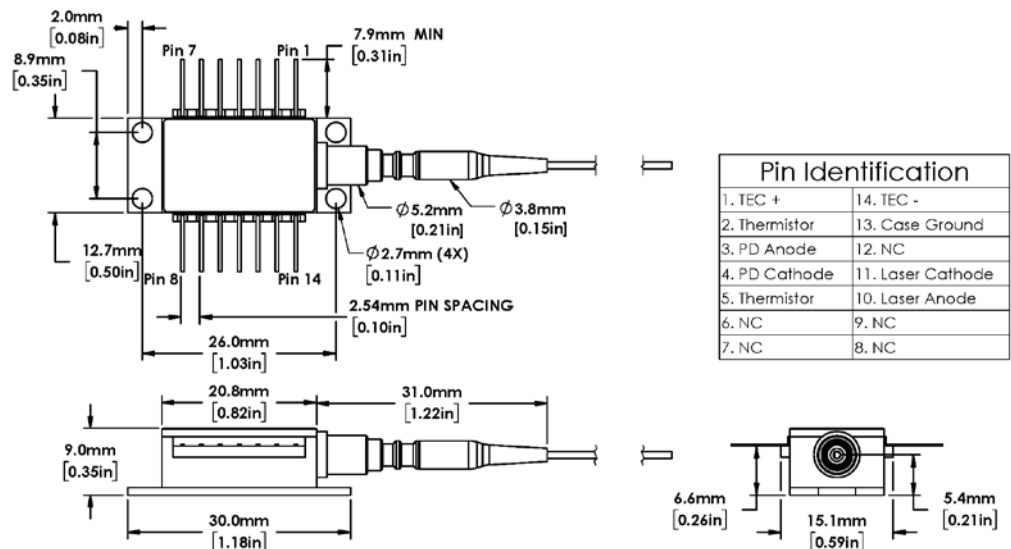
Parameter	Symbol	Value	Unit
Operating Current	$I_{op}$	380.0	mA
Operating Temperature	$T_{op}$	25.0	°C
Fiber Output Power @ $I_{op}, T_{op}$	$P_{out}$	30.6	mW
Voltage @ $I_{op}, T_{op}$	$V_F$	2.19	V
Monitor Current @ $I_{op}, T_{op}$	$I_{mon}$	2.020	mA
SMSR @ $I_{op}, T_{op}$	SMSR	39.2	dB
Threshold Current @ $T_{op}$	$I_{th}$	53.9	mA
Slope Efficiency @ $T_{op}$	$\Delta P / \Delta I$	0.09	W/A
Current Tuning	$\Delta \lambda / \Delta I$	0.0020	nm/mA
Temperature Tuning	$\Delta \lambda / \Delta T$	0.023	nm/°C

### Absolute Maximum Ratings

Parameter	Ratings	Unit
Laser Diode Current*	400	mA
Optical Output Power*	400	mW
LD Reverse Voltage*	2	V
Storage Temperature	-20~+75	°C
Case Temperature	0~+50	°C
Steinhart Constants:	* CW, $T_{case}=25^{\circ}C$	
	a=1.129241E-3; b=2.341077E-4; c=8.775468E-8	



CAUTION- use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure. There are no user serviceable parts in this product. When proper power is applied to this product, Laser radiation will be emitted from the optical fiber.



### Important Notes:

1. The maximum ratings mean the limitation over which the laser should not be operated even instant time.
2. **Do not clean the fiber connector when the diode is in operation. The laser should be off when plugging or un-plugging the connector.**
3. To protect the laser diode from damage due to static electricity (ESD), please follow proper ESD handling precautions.
4. Do not pull or fold the fiber. The fiber is very fragile and easily broken. Avoid handling the fiber by the rubber "boots" of the black housing and connector ends of the pigtail.
5. To ensure safe operation use only with a suitable power source that complies with the pertinent requirements for laser systems as specified in IEC-60825-1 "Safety of Laser Products."



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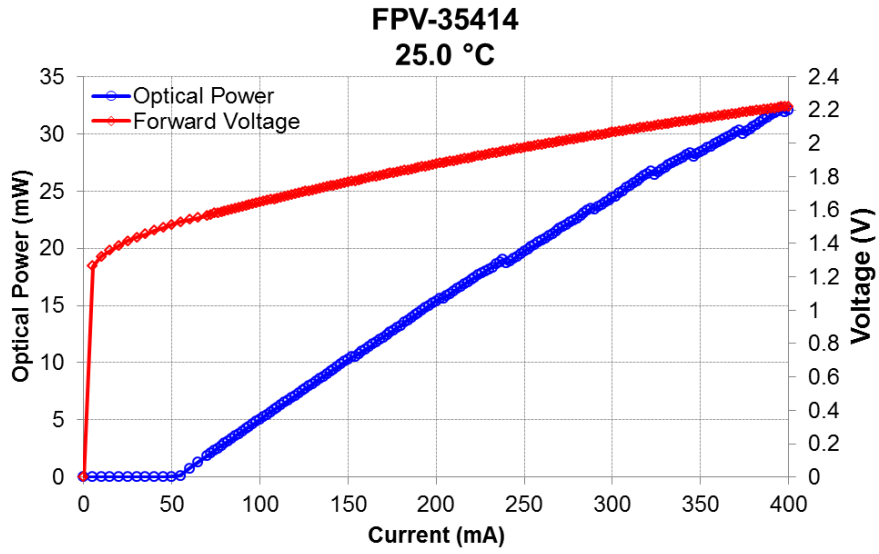


Figure 1: Output Power and Operating Voltage versus Bias Current

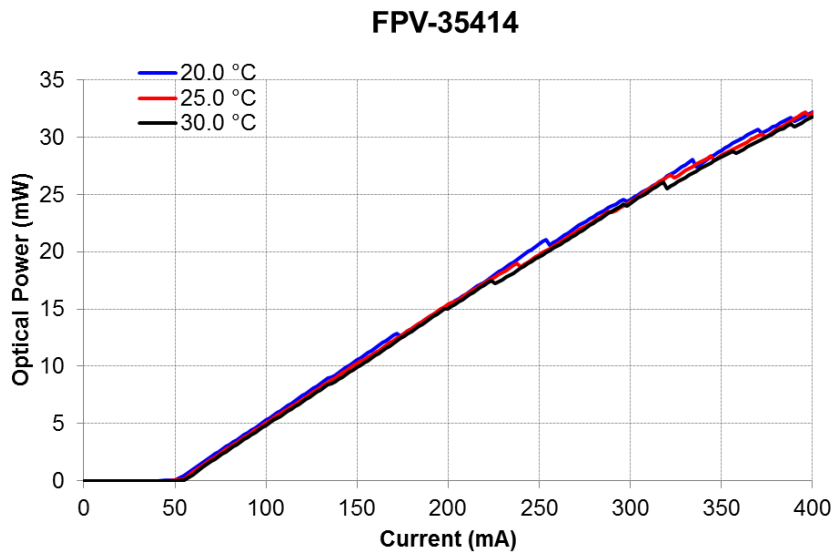


Figure 2: Output Power versus Bias Current

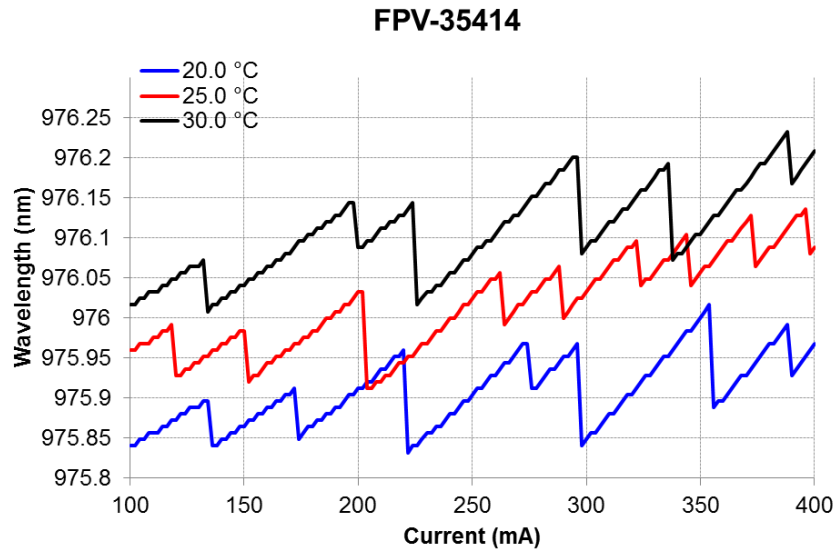


Figure 3: Wavelength versus Bias Current

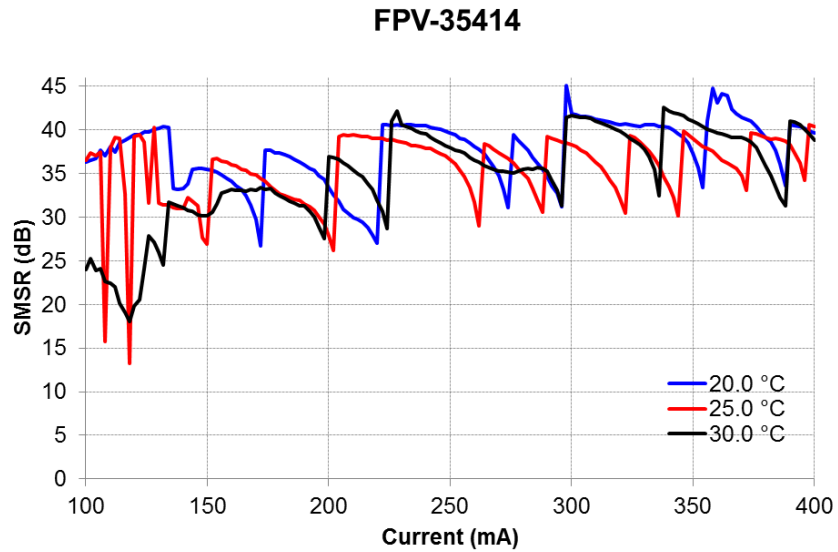


Figure 4: Side Mode Suppression Ratio (SMSR) versus Bias Current

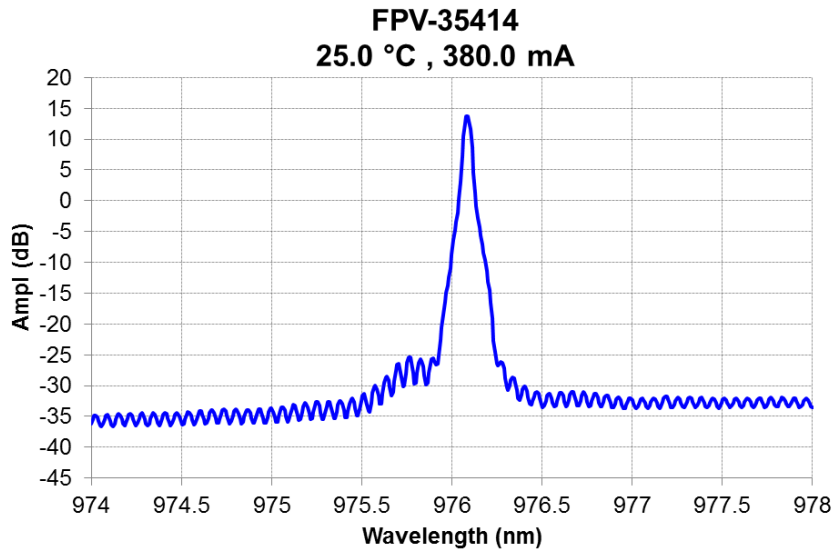


Figure 5: Optical Spectrum (RBW=0.02nm)

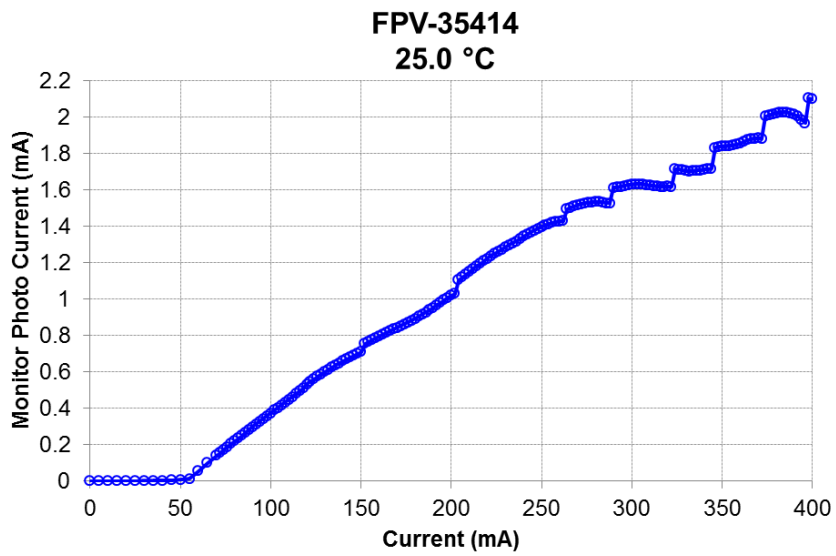


Figure 6: Monitor Photodiode Current versus Bias Current