

## Laser Diode

FPL785S-250



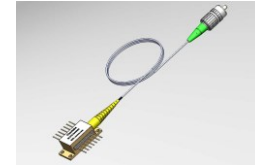
S/N: FPL-27086

Center Wavelength: 788.5 nm  
Fiber Type: 780HP  
Test Date: 4/18/2017



Diode Package:  
Connector: NA  
Tested By: Paya

QA: Pass



### Summary of Test Data ( CW, $T_{chip}=25^{\circ}C$ )

Parameter	Symbol	Value	Unit
Fiber Output Power	$P_{op}$	250.0	mW
Operating Current@ $P_{op}$	$I_{op}$	486.4	mA
Operating Voltage@ $P_{op}$	$V_{op}$	2.15	V
Monitor Current <sup>4</sup> @ $P_{op}$	$I_{mon}$	1.564	mA
Threshold Current	$I_{th}$	87.3	mA
Slope Efficiency	$\Delta P/\Delta I$	0.61	W/A

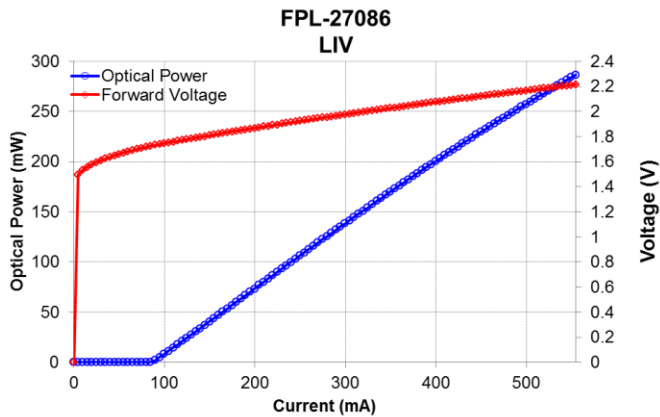
### Absolute Maximum Ratings

Parameter	Ratings	Unit
Laser Diode Current*	550	mA
Optical Output Power*	300	mW
LD Reverse Voltage*	2	V
Storage Temperature	-10 ~ 70	$^{\circ}C$
Case Temperature	0 ~ 70	$^{\circ}C$

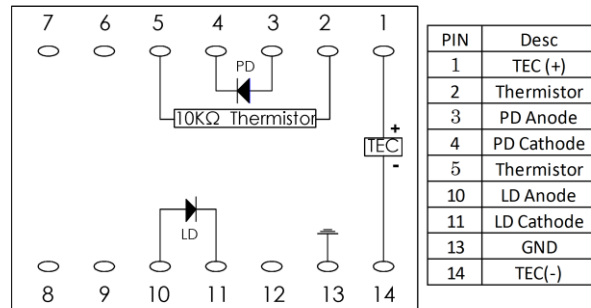
\* CW,  $T_{chip}=25^{\circ}C$

LASER RADIATION  
AVOID EXPOSURE TO BEAM  
CLASS 3B LASER PRODUCT

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 distal fiber end.



### Pin Diagram



Select Type 1 Pin Configuration when use Thorlabs Butterfly Diode Mount

### Important Notes:

- The maximum ratings mean the limitation over which the laser should not be operated even momentarily.
- To protect the laser diode from damage due to static electricity (ESD), please follow proper ESD handling precautions.
- 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."
- The monitor PD is intended to be used as a soft indicator of relative power. Its current value may change if the coiled fiber is repositioned. For monitoring absolute power, an external fiber tap coupler with separate monitor PD is recommended.
- Refer to the Spec Sheet for complete specifications and additional operation notes.



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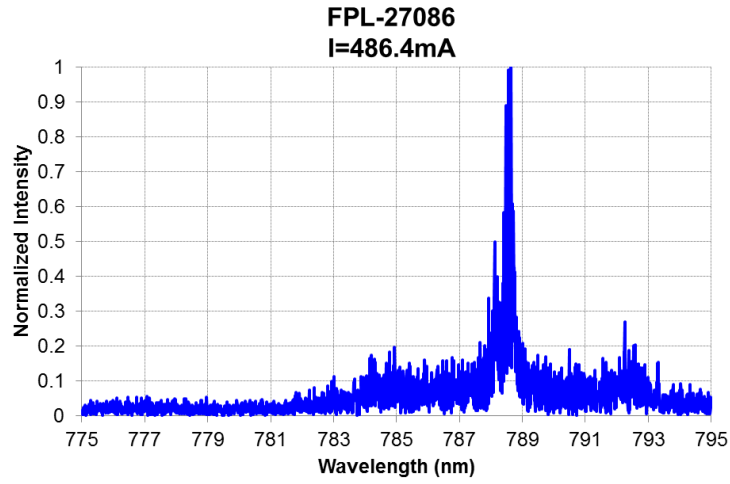
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$T_{\text{chip}}=25^{\circ}\text{C}$ ,  $I_{\text{op}}= 486.4\text{mA}$   
Spectrum measured by Thorlabs OSA201.