

# Volume-Holographic-Grating (VHG) Wavelength-Stabilized Single-Frequency Laser DIODE

LD808-SEV500



S/N: 808WK04.B05

Wavelength: 808.0nm

Test Date: 3/2/2018



Diode Package: TO 9 mm

Tested By: Paya



QA: Pass

**Summary of Test Data ( CW )**

Parameter	Symbol	Value	Unit
Operating Current@500mW,25.0°C	$I_{op}$	750.87	mA
Voltage@500mW,25.0°C	$V_F$	2.18	V
Side-Mode Suppression Ratio@500mW,25.0°C	SMSR	40.7	dB
Threshold Current@25.0°C	$I_{th}$	126.5	mA
Slop Efficiency@25.0°C	$\Delta P/\Delta I$	0.80	W/A

**Absolute Maximum Ratings**

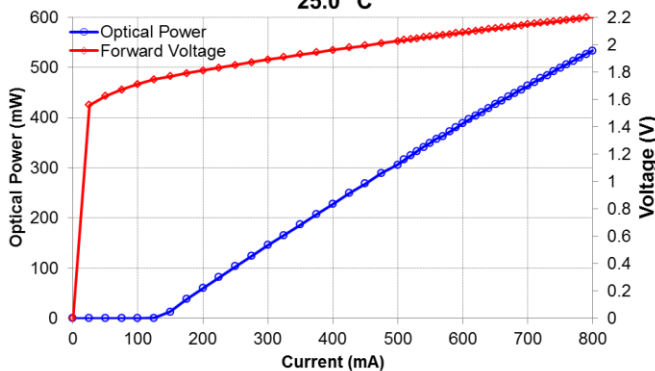
Parameter	Ratings
Laser Diode Current*	800
Optical Output Power*	500
LD Reverse Voltage*	2
Storage Temperature	-40~+80
Case Temperature	-20~+40

\* CW

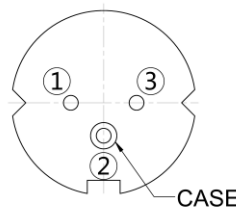


**CAUTION-** use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure. There are no user serviceable parts in this product. When proper power is applied to this product, Laser radiation will be emitted from TO-window.

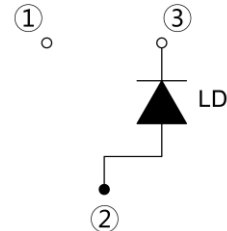
**808WK04.B05  
25.0 °C**



**Diode Bottom View**



**Pin Code E**



**Important Notes:**

1. The maximum ratings mean the limitation over which the laser should not be operated even instant time.
2. To protect the laser diode from damage due to static electricity (ESD), please follow proper ESD handling precautions.
3. 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."



**USA, Canada, and South America**

Thorlabs, Inc.  
56 Sparta Avenue  
Newton, NJ 07860, USA

Tel: 973-579-7227  
Fax: 973-300-3600

**Europe**

Thorlabs GmbH  
85221 Dachau, Germany  
Tel: +49-(0)8131-5956-0

**Scandinavia**

Thorlabs Sweden AB  
400 20 Göteborg, Sweden  
Tel: +46-31-733-30-00

**UK and Ireland**

Thorlabs LTD.  
Cambridgeshire CB7 4EX, GB  
Tel: +44 (0)1353-654440

**Japan and Asia**

Thorlabs Japan Inc.  
Toshima-ku, Tokyo 170-0013, Japan  
Tel: +81-3-5979-8889

**France**

Thorlabs SAS  
78600 Maisons-Laffitte, France  
Tel: +33 (0) 970 444 844

**China**

Thorlabs China  
Shanghai, China  
Tel: +86 (0)21-32513486



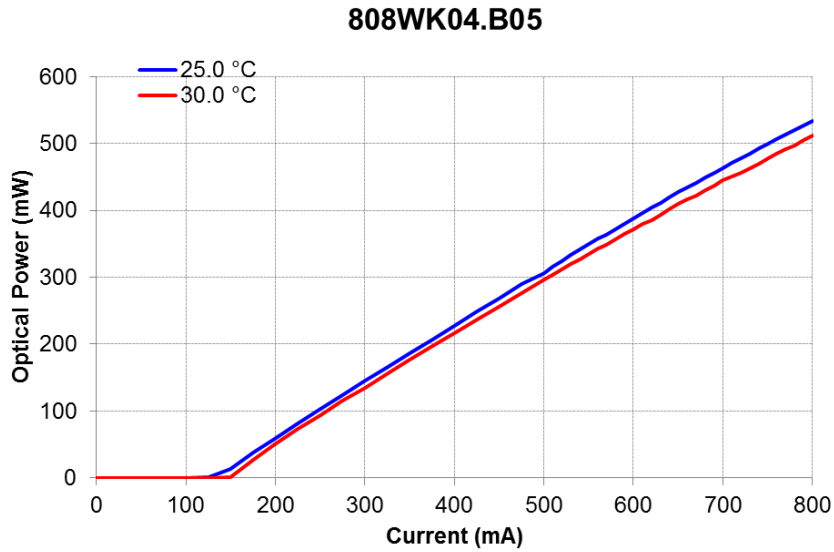


Figure 2: Output Power vs. Current over wavelength stabilized temperature range.

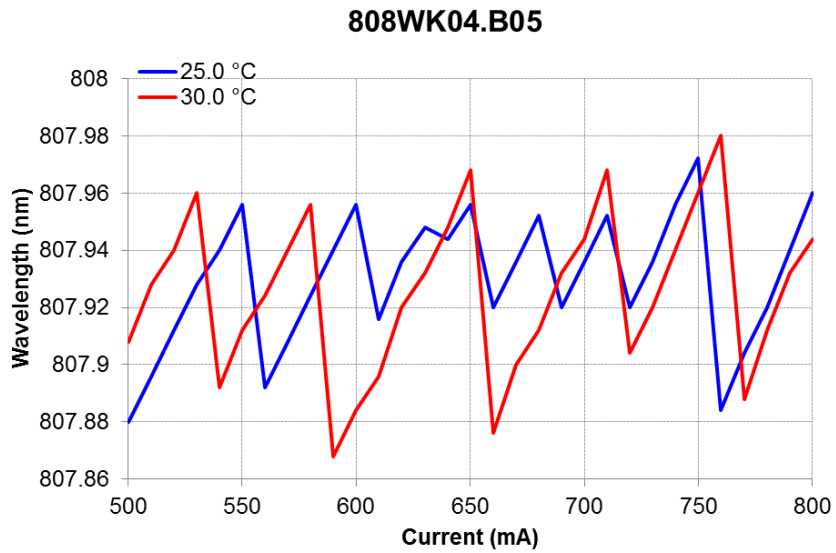


Figure 3: Wavelength vs. Current over wavelength stabilized temperature range. Measured with Yokogawa AQ6370C, Resolution Bandwidth = 0.02nm.

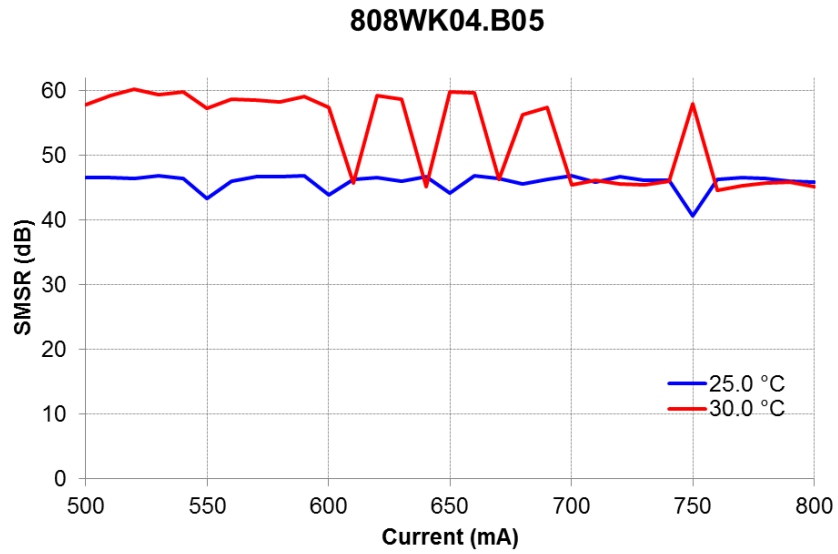


Figure 4: Side-Mode Suppression Ratio vs. Current over wavelength stabilized temperature range. Measured with Yokogawa AQ6370C, Resolution Bandwidth = 0.02nm.

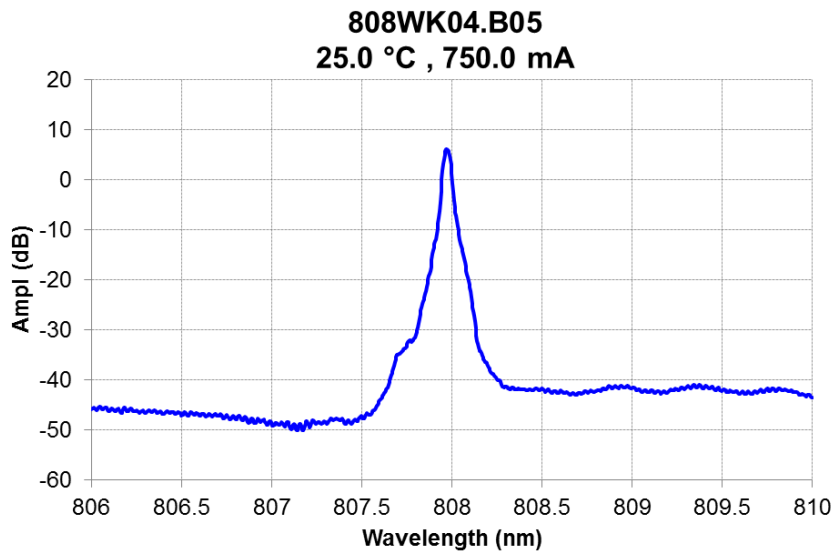


Figure 5: Optical Spectrum. Measured with Yokogawa AQ6370C, Resolution Bandwidth = 0.02nm.