

*Photodigm* 

# PRODUCT CATALOG

UPDATED SEPTEMBER 2023

Photodigm, Inc.  
1155 E. Collins Blvd, Suite 200  
Richardson, Texas 75081

972-235-7584  
Sales@Photodigm.com  
Photodigm.com

 @Photodigm

 @PhotodigmInc

# SEMICONDUCTORS THAT SHINE

WE DESIGN, TEST, AND MANUFACTURE DBR LASER DIODES 730-1090 nm

Photodigm is the only commercial manufacturer of Distributed Bragg Reflector (DBR) laser diodes in the world and our technology IP is protected with 30+ patents and 20+ years of expertly tuning our manufacturing processes. All lasers are designed, tested, and manufactured at Photodigm Headquarters in Richardson, Texas in our on-site fabrication facility.

Our Distributed Bragg Reflector (DBR) Laser Diode is...

**PRECISE** | Deterministic Single-Frequency Wavelengths 730–1090 nm

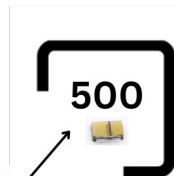
**RELIABLE** | Monolithic Semiconductor Design

**PORTABLE** | 500 lasers will fit on an average person's thumbnail

**ACCURATE** | Wavelength Stability, Mode Hop Free tuning range

**SCALABLE** | Cost elasticity for OEM solutions

**SPECIFIC** | Stimulates K, Rb, Ca, Cs, Ca+, and He\* Chemical Elements



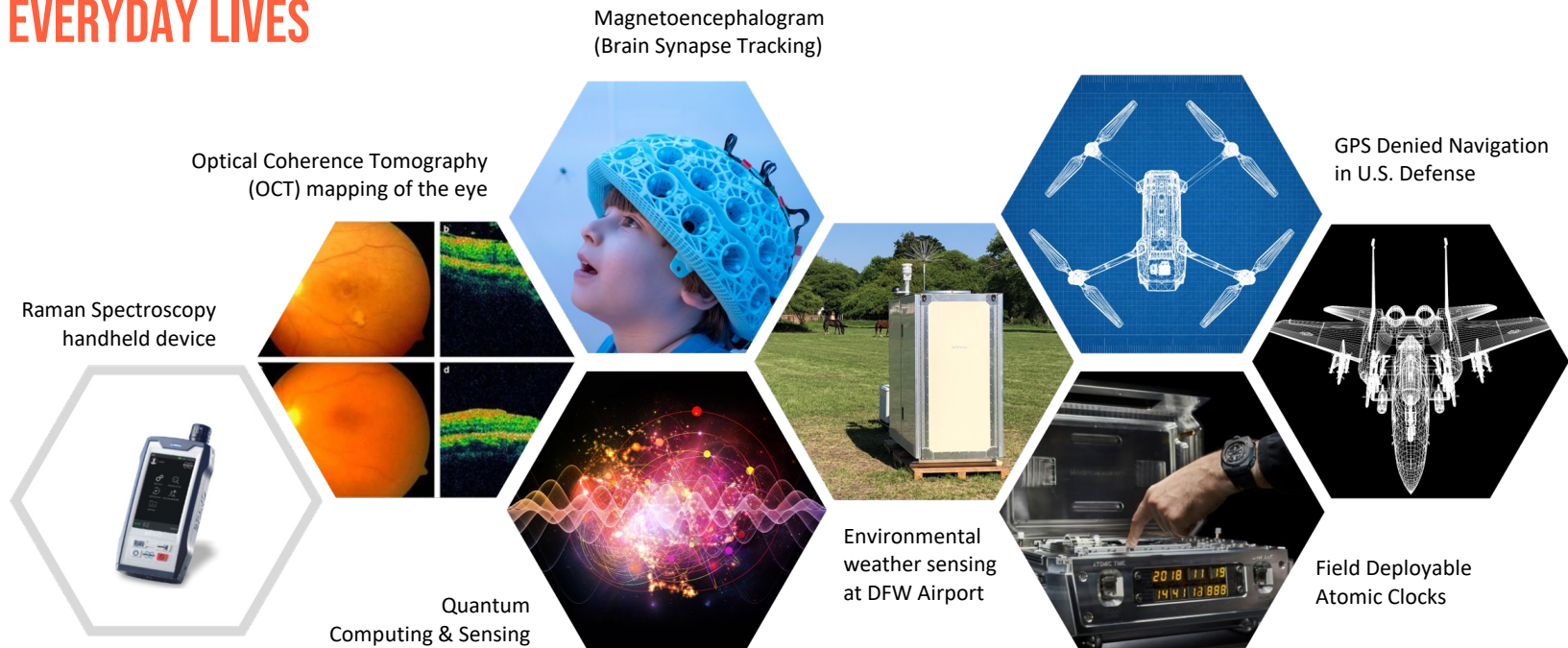
**IT'S SO TINY!**

300 microns wide x 2000 microns long x 100 microns high ... to be exact!

MADE  
in the  
USA

# WE ENABLE A PRECISE WORLD

## APPLICATIONS CRITICAL TO OUR EVERYDAY LIVES





# SELECT A DBR IN 4 STEPS

01

## WAVELENGTH

730 – 1090 nm

02

## CHIP ARCHITECTURE

High Power, Low Power,  
or High Operating Temp (HOT)

03

## MOUNTING ADD-ONS

Mode Hop Free or Virtual  
Point Source (VPS) Lens

04

## PACKAGING ADD-ONS

9MM, C-Mount, TO-8, TOSA,  
Butterfly, or Butterfly-ISO



# ALL WAVELENGTHS

λ (nm)	Chip Architecture	Chip on Submount List Price	CW Power Range (mW)	MOUNTING ADD-ONS		PACKAGING ADD-ONS					
				Mode Hop Free*	Virtual Point Source (VPS) Lens**	9MM	C-Mount	TO-8***	TOSA	Butterfly	Butterfly-ISO****
730	DBR High Power Chip	RFQ	40 - 80	+ \$700	-	-	+ \$100	+ \$500	+ \$500	+ \$2500	+ \$3000
737	DBR High Power Chip	RFQ	40 - 80	+ \$700	-	-	+ \$100	+ \$500	+ \$500	+ \$2500	+ \$3000
739	DBR High Power Chip	RFQ	40 - 80	+ \$700	-	-	+ \$100	+ \$500	+ \$500	+ \$2500	+ \$3000
760	DBR High Power Chip	\$3750	40 - 60	+ \$700	+ \$700	-	+ \$100	+ \$500	+ \$500	+ \$2500	+ \$3000
766.700 (K)	DBR High Power Chip	\$3750	40 - 80	+ \$700	+ \$700	-	+ \$100	+ \$500	+ \$500	+ \$2500	+ \$3000
770.108 (K)	DBR High Power Chip	\$3750	40 - 100	+ \$700	+ \$700	-	+ \$100	+ \$500	+ \$500	+ \$2500	+ \$3000
776.061 (Rb)	DBR High Power Chip	RFQ	40 - 120	+ \$700	+ \$700	-	+ \$100	+ \$500	+ \$500	+ \$2500	+ \$3000
778.105 (Rb)	DBR High Power Chip	\$3750	80 - 180	+ \$700	+ \$700	-	+ \$100	+ \$500	+ \$500	+ \$2500	+ \$3000
780.241 (Rb)	DBR HOT Chip	\$4250	10 - 30	-	+ \$700	+ \$150	+ \$100	+ \$500	+ \$500	+ \$2500	-
	DBR Low Power Chip	\$2750	40 - 80	+ \$700	+ \$700	+ \$150	+ \$100	+ \$500	+ \$500	+ \$2500	+ \$3000
	DBR High Power Chip	\$3750	80 - 180	+ \$700	+ \$700	-	+ \$100	+ \$500	+ \$500	+ \$2500	+ \$3000
785	DBR Low Power Chip	\$2750	40 - 80	+ \$700	+ \$700	+ \$150	+ \$100	+ \$500	+ \$500	+ \$2500	-
	DBR High Power Chip	\$3750	80 - 180	+ \$700	+ \$700	-	+ \$100	+ \$500	+ \$500	+ \$2500	+ \$3000
794.978 (Rb)	DBR HOT Chip	\$4250	10 - 30	-	+ \$700	+ \$150	+ \$100	+ \$500	+ \$500	+ \$2500	-
	DBR Low Power Chip	\$2750	40 - 80	+ \$700	+ \$700	+ \$150	+ \$100	+ \$500	+ \$500	+ \$2500	+ \$3000
	DBR High Power Chip	\$3750	80 - 180	+ \$700	+ \$700	-	+ \$100	+ \$500	+ \$500	+ \$2500	+ \$3000
800	DBR High Power Chip	\$3750	80 - 180	+ \$700	+ \$700	-	+ \$100	+ \$500	+ \$500	+ \$2500	+ \$3000
808	DBR High Power Chip	\$3750	80 - 180	+ \$700	-	-	+ \$100	+ \$500	+ \$500	+ \$2500	+ \$3000
810	DBR High Power Chip	\$3750	80 - 180	+ \$700	-	-	+ \$100	+ \$500	+ \$500	+ \$2500	+ \$3000
816	DBR High Power Chip	\$3750	80 - 180	+ \$700	-	-	+ \$100	+ \$500	+ \$500	+ \$2500	+ \$3000
823	DBR High Power Chip	\$3750	80 - 180	+ \$700	-	-	+ \$100	+ \$500	+ \$500	+ \$2500	+ \$3000
828	DBR High Power Chip	\$3750	80 - 180	+ \$700	+ \$700	-	+ \$100	+ \$500	+ \$500	+ \$2500	+ \$3000
830	DBR High Power Chip	\$3750	80 - 180	+ \$700	+ \$700	-	+ \$100	+ \$500	+ \$500	+ \$2500	+ \$3000
845.584 (Ca)	DBR High Power Chip	\$3750	80 - 240	+ \$700	+ \$700	-	+ \$100	+ \$500	+ \$500	+ \$2500	+ \$3000
852.347 (Cs)	DBR HOT Chip	\$4250	10 - 30	-	+ \$700	+ \$150	+ \$100	+ \$500	+ \$500	+ \$2500	-
	DBR Low Power Chip	\$2750	40 - 80	+ \$700	+ \$700	+ \$150	+ \$100	+ \$500	+ \$500	+ \$2500	+ \$3000
	DBR High Power Chip	\$3750	80 - 240	+ \$700	+ \$700	-	+ \$100	+ \$500	+ \$500	+ \$2500	+ \$3000
854.209 (Ca+)	DBR High Power Chip	\$3750	80 - 240	+ \$700	+ \$700	-	+ \$100	+ \$500	+ \$500	+ \$2500	+ \$3000
866.214 (Ca+)	DBR High Power Chip	\$3750	80 - 240	+ \$700	+ \$700	-	+ \$100	+ \$500	+ \$500	+ \$2500	+ \$3000
894.592 (Cs)	DBR Low Power Chip	\$2750	40 - 120	+ \$700	+ \$700	+ \$150	+ \$100	+ \$500	+ \$500	+ \$2500	-
	DBR High Power Chip	\$3750	80 - 240	+ \$700	+ \$700	-	+ \$100	+ \$500	+ \$500	+ \$2500	+ \$3000
920	DBR High Power Chip	RFQ	80 - 240	+ \$700	-	-	+ \$100	+ \$500	+ \$500	+ \$2500	+ \$3000
935	DBR High Power Chip	\$3750	80 - 240	+ \$700	-	-	+ \$100	+ \$500	+ \$500	+ \$2500	+ \$3000
976	DBR Low Power Chip	\$2750	40 - 200	+ \$700	-	+ \$150	+ \$100	+ \$500	+ \$500	+ \$2500	+ \$3000
	DBR High Power Chip	\$3750	80 - 350	+ \$700	-	-	+ \$100	+ \$500	+ \$500	+ \$2500	+ \$3000
1036	DBR Low Power Chip	\$2750	40 - 180	+ \$700	-	+ \$150	+ \$100	+ \$500	+ \$500	+ \$2500	+ \$3000
1039	DBR Low Power Chip	\$2750	40 - 180	+ \$700	-	+ \$150	+ \$100	+ \$500	+ \$500	+ \$2500	+ \$3000
1064	DBR Low Power Chip	\$2750	40 - 180	+ \$700	+ \$700	+ \$150	+ \$100	+ \$500	+ \$500	+ \$2500	+ \$3000
	DBR High Power Chip	\$3750	100 - 350	+ \$700	-	-	+ \$100	+ \$500	+ \$500	+ \$2500	+ \$3000
1080	DBR Low Power Chip	\$2750	40 - 180	+ \$700	+ \$700	+ \$150	+ \$100	+ \$500	+ \$500	+ \$2500	+ \$3000
1083.33 (He*)	DBR Low Power Chip	\$2750	40 - 120	+ \$700	+ \$700	+ \$150	+ \$100	+ \$500	+ \$500	+ \$2500	+ \$3000
	DBR High Power Chip	\$3750	100 - 350	+ \$700	-	-	+ \$100	+ \$500	+ \$500	+ \$2500	+ \$3000
1090	DBR Low Power Chip	\$2750	40 - 180	+ \$700	+ \$700	+ \$150	+ \$100	+ \$500	+ \$500	+ \$2500	+ \$3000
Accessory	TO-8 Mount	\$525									
Accessory	TOSA Mount	\$525									

\* Mode-Hop Free Mounting cannot be combined with a 9MM package.

\*\*Virtual Point Source (VPS) Lens only available 760–800 nm and 828–894.592 nm Chips. VPS is also available in 1064–1090 nm Low Power Chips. Additional coatings are available with NRE. A VPS Lens cannot be combined with a 9MM, Butterfly, or Butterfly-ISO package.

\*\*\*Hermetic Sealing is standard on our 9MM, TOSA, and Butterfly add-on packages. The TO-8 package can be hermetically sealed for an additional \$100/per unit. Ask Photodigm Sales for details on batch timing and expedited options, additional costs may apply.

\*\*\*\*The Butterfly-ISO package add-on cost is a pass-through free from THORLABS, our third-party vendor. A Butterfly-ISO package drastically impacts the power range of the device, so request adjusted power levels from Photodigm Sales.

Photodigm Spectroscopy Certified wavelengths are guaranteed to be tunable to the relevant spectroscopy line at 25 °C ± 10 °C.

# SPECTROSCOPY CERTIFIED

Whether you need to hit the transition lines of K, Rb, Ca, Cs, Ca+, or He\* — our Photodigm Spectroscopy Certified wavelengths are guaranteed to be tunable to the relevant spectroscopy lines at a laser temperature of 25 °C ± 10 °C. Spectroscopy Certified wavelengths are unmatched precision designed specifically for atomic clocks and guaranteed to hit the specific atomic transition you need.



λ (nm)	Chip Architecture	Chip on Submount List Price	CW Power Range (mW)	MOUNTING ADD-ONS		PACKAGING ADD-ONS					
				Mode Hop Free*	Virtual Point Source (VPS) Lens**	9MM	C-Mount	TO-8***	TOSA	Butterfly	Butterfly-ISO****
766.700 (K)	DBR High Power Chip	\$3750	40 - 80	+ \$700	+ \$700	-	+ \$100	+ \$500	+ \$500	+ \$2500	+ \$3000
770.108 (K)	DBR High Power Chip	\$3750	40 - 100	+ \$700	+ \$700	-	+ \$100	+ \$500	+ \$500	+ \$2500	+ \$3000
776.061 (Rb)	DBR High Power Chip	RFQ	40 - 120	+ \$700	+ \$700	-	+ \$100	+ \$500	+ \$500	+ \$2500	+ \$3000
778.105 (Rb)	DBR High Power Chip	\$3750	80 - 180	+ \$700	+ \$700	-	+ \$100	+ \$500	+ \$500	+ \$2500	+ \$3000
780.241 (Rb)	DBR HOT Chip	\$4250	10 - 30	-	+ \$700	+ \$150	+ \$100	+ \$500	+ \$500	+ \$2500	-
	DBR Low Power Chip	\$2750	40 - 80	+ \$700	+ \$700	+ \$150	+ \$100	+ \$500	+ \$500	+ \$2500	+ \$3000
	DBR High Power Chip	\$3750	80 - 180	+ \$700	+ \$700	-	+ \$100	+ \$500	+ \$500	+ \$2500	+ \$3000
794.978 (Rb)	DBR HOT Chip	\$4250	10 - 30	-	+ \$700	+ \$150	+ \$100	+ \$500	+ \$500	+ \$2500	-
	DBR Low Power Chip	\$2750	40 - 80	+ \$700	+ \$700	+ \$150	+ \$100	+ \$500	+ \$500	+ \$2500	+ \$3000
	DBR High Power Chip	\$3750	80 - 180	+ \$700	+ \$700	-	+ \$100	+ \$500	+ \$500	+ \$2500	+ \$3000
845.584 (Ca)	DBR High Power Chip	\$3750	80 - 240	+ \$700	+ \$700	-	+ \$100	+ \$500	+ \$500	+ \$2500	+ \$3000
852.347 (Cs)	DBR HOT Chip	\$4250	10 - 30	-	+ \$700	+ \$150	+ \$100	+ \$500	+ \$500	+ \$2500	-
	DBR Low Power Chip	\$2750	40 - 80	+ \$700	+ \$700	+ \$150	+ \$100	+ \$500	+ \$500	+ \$2500	+ \$3000
	DBR High Power Chip	\$3750	80 - 240	+ \$700	+ \$700	-	+ \$100	+ \$500	+ \$500	+ \$2500	+ \$3000
854.209 (Ca+)	DBR High Power Chip	\$3750	80 - 240	+ \$700	+ \$700	-	+ \$100	+ \$500	+ \$500	+ \$2500	+ \$3000
866.214 (Ca+)	DBR High Power Chip	\$3750	80 - 240	+ \$700	+ \$700	-	+ \$100	+ \$500	+ \$500	+ \$2500	+ \$3000
894.592 (Cs)	DBR Low Power Chip	\$2750	40 - 120	+ \$700	+ \$700	+ \$150	+ \$100	+ \$500	+ \$500	+ \$2500	-
	DBR High Power Chip	\$3750	80 - 240	+ \$700	+ \$700	-	+ \$100	+ \$500	+ \$500	+ \$2500	+ \$3000
1083.33 (He*)	DBR Low Power Chip	\$2750	40 - 120	+ \$700	+ \$700	+ \$150	+ \$100	+ \$500	+ \$500	+ \$2500	+ \$3000
	DBR High Power Chip	\$3750	100 - 350	+ \$700	-	-	+ \$100	+ \$500	+ \$500	+ \$2500	+ \$3000

\* Mode-Hop Free Mounting cannot be combined with a 9MM package.

\*\*Virtual Point Source (VPS) Lens only available 760–800 nm and 828–894.592 nm Chips. VPS is also available in 1064–1090 nm Low Power Chips. Additional coatings are available with NRE. A VPS Lens cannot be combined with a 9MM, Butterfly, or Butterfly-ISO package.

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Photodigm Spectroscopy Certified wavelengths are guaranteed to be tunable to the relevant spectroscopy line at 25 °C ± 10 °C.



# HIGH POWER DBR LASER DIODES

Our Photodigm High Power Laser Diodes are designed with a longer gain section and a tapered structure to deliver a high output power that ranges up to 350mW in some wavelengths.

λ (nm)	Chip Architecture	Chip on Submount List Price	CW Power Range (mW)	MOUNTING ADD-ONS		PACKAGING ADD-ONS					
				Mode Hop Free*	Virtual Point Source (VPS) Lens**	9MM	C-Mount	TO-8***	TOSA	Butterfly	Butterfly-ISO****
730	DBR High Power Chip	RFQ	40 - 80	+ \$700	-	-	+ \$100	+ \$500	+ \$500	+ \$2500	+ \$3000
737	DBR High Power Chip	RFQ	40 - 80	+ \$700	-	-	+ \$100	+ \$500	+ \$500	+ \$2500	+ \$3000
739	DBR High Power Chip	RFQ	40 - 80	+ \$700	-	-	+ \$100	+ \$500	+ \$500	+ \$2500	+ \$3000
760	DBR High Power Chip	\$3750	40 - 60	+ \$700	+ \$700	-	+ \$100	+ \$500	+ \$500	+ \$2500	+ \$3000
766.700 (K)	DBR High Power Chip	\$3750	40 - 80	+ \$700	+ \$700	-	+ \$100	+ \$500	+ \$500	+ \$2500	+ \$3000
770.108 (K)	DBR High Power Chip	\$3750	40 - 100	+ \$700	+ \$700	-	+ \$100	+ \$500	+ \$500	+ \$2500	+ \$3000
776.061 (Rb)	DBR High Power Chip	RFQ	40 - 120	+ \$700	+ \$700	-	+ \$100	+ \$500	+ \$500	+ \$2500	+ \$3000
778.105 (Rb)	DBR High Power Chip	\$3750	80 - 180	+ \$700	+ \$700	-	+ \$100	+ \$500	+ \$500	+ \$2500	+ \$3000
780.241 (Rb)	DBR High Power Chip	\$3750	80 - 180	+ \$700	+ \$700	-	+ \$100	+ \$500	+ \$500	+ \$2500	+ \$3000
785	DBR High Power Chip	\$3750	80 - 180	+ \$700	+ \$700	-	+ \$100	+ \$500	+ \$500	+ \$2500	+ \$3000
794.978 (Rb)	DBR High Power Chip	\$3750	80 - 180	+ \$700	+ \$700	-	+ \$100	+ \$500	+ \$500	+ \$2500	+ \$3000
800	DBR High Power Chip	\$3750	80 - 180	+ \$700	+ \$700	-	+ \$100	+ \$500	+ \$500	+ \$2500	+ \$3000
808	DBR High Power Chip	\$3750	80 - 180	+ \$700	-	-	+ \$100	+ \$500	+ \$500	+ \$2500	+ \$3000
810	DBR High Power Chip	\$3750	80 - 180	+ \$700	-	-	+ \$100	+ \$500	+ \$500	+ \$2500	+ \$3000
816	DBR High Power Chip	\$3750	80 - 180	+ \$700	-	-	+ \$100	+ \$500	+ \$500	+ \$2500	+ \$3000
823	DBR High Power Chip	\$3750	80 - 180	+ \$700	-	-	+ \$100	+ \$500	+ \$500	+ \$2500	+ \$3000
828	DBR High Power Chip	\$3750	80 - 180	+ \$700	+ \$700	-	+ \$100	+ \$500	+ \$500	+ \$2500	+ \$3000
830	DBR High Power Chip	\$3750	80 - 180	+ \$700	+ \$700	-	+ \$100	+ \$500	+ \$500	+ \$2500	+ \$3000
845.584 (Ca)	DBR High Power Chip	\$3750	80 - 240	+ \$700	+ \$700	-	+ \$100	+ \$500	+ \$500	+ \$2500	+ \$3000
852.347 (Cs)	DBR High Power Chip	\$3750	80 - 240	+ \$700	+ \$700	-	+ \$100	+ \$500	+ \$500	+ \$2500	+ \$3000
854.209 (Ca+)	DBR High Power Chip	\$3750	80 - 240	+ \$700	+ \$700	-	+ \$100	+ \$500	+ \$500	+ \$2500	+ \$3000
866.214 (Ca+)	DBR High Power Chip	\$3750	80 - 240	+ \$700	+ \$700	-	+ \$100	+ \$500	+ \$500	+ \$2500	+ \$3000
894.592 (Cs)	DBR High Power Chip	\$3750	80 - 240	+ \$700	+ \$700	-	+ \$100	+ \$500	+ \$500	+ \$2500	+ \$3000
920	DBR High Power Chip	RFQ	80 - 240	+ \$700	-	-	+ \$100	+ \$500	+ \$500	+ \$2500	+ \$3000
935	DBR High Power Chip	\$3750	80 - 240	+ \$700	-	-	+ \$100	+ \$500	+ \$500	+ \$2500	+ \$3000
976	DBR High Power Chip	\$3750	80 - 350	+ \$700	-	-	+ \$100	+ \$500	+ \$500	+ \$2500	+ \$3000
1064	DBR High Power Chip	\$3750	100 - 350	+ \$700	-	-	+ \$100	+ \$500	+ \$500	+ \$2500	+ \$3000
1083.33 (He*)	DBR High Power Chip	\$3750	100 - 350	+ \$700	-	-	+ \$100	+ \$500	+ \$500	+ \$2500	+ \$3000

\* Mode-Hop Free Mounting cannot be combined with a 9MM package.

\*\*Virtual Point Source (VPS) Lens only available 760–800 nm and 828–894.592 nm Chips. VPS is also available in 1064–1090 nm Low Power Chips. Additional coatings are available with NRE. A VPS Lens cannot be combined with a 9MM, Butterfly, or Butterfly-ISO package.

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Photodigm Spectroscopy Certified wavelengths are guaranteed to be tunable to the relevant spectroscopy line at 25 °C ± 10 °C.

# LOW POWER DBR LASER DIODES

Our Photodigm Low Power DBR laser diodes are designed to deliver low output powers in small packages while remaining tunable.

$\lambda$ (nm)	Chip Architecture	Chip on Submount List Price	CW Power Range (mW)	MOUNTING ADD-ONS		PACKAGING ADD-ONS					
				Mode Hop Free*	Virtual Point Source (VPS) Lens**	9MM	C-Mount	TO-8***	TOSA	Butterfly	Butterfly-ISO****
<b>780.241 (Rb)</b>	DBR Low Power Chip	\$2750	40 - 80	+ \$700	+ \$700	+ \$150	+ \$100	+ \$500	+ \$500	+ \$2500	+ \$3000
<b>785</b>	DBR Low Power Chip	\$2750	40 - 80	+ \$700	+ \$700	+ \$150	+ \$100	+ \$500	+ \$500	+ \$2500	-
<b>794.978 (Rb)</b>	DBR Low Power Chip	\$2750	40 - 80	+ \$700	+ \$700	+ \$150	+ \$100	+ \$500	+ \$500	+ \$2500	+ \$3000
<b>852.347 (Cs)</b>	DBR Low Power Chip	\$2750	40 - 80	+ \$700	+ \$700	+ \$150	+ \$100	+ \$500	+ \$500	+ \$2500	+ \$3000
<b>894.592 (Cs)</b>	DBR Low Power Chip	\$2750	40 - 120	+ \$700	+ \$700	+ \$150	+ \$100	+ \$500	+ \$500	+ \$2500	-
<b>976</b>	DBR Low Power Chip	\$2750	40 - 200	+ \$700	-	+ \$150	+ \$100	+ \$500	+ \$500	+ \$2500	+ \$3000
<b>1036</b>	DBR Low Power Chip	\$2750	40 - 180	+ \$700	-	+ \$150	+ \$100	+ \$500	+ \$500	+ \$2500	+ \$3000
<b>1039</b>	DBR Low Power Chip	\$2750	40 - 180	+ \$700	-	+ \$150	+ \$100	+ \$500	+ \$500	+ \$2500	+ \$3000
<b>1064</b>	DBR Low Power Chip	\$2750	40 - 180	+ \$700	+ \$700	+ \$150	+ \$100	+ \$500	+ \$500	+ \$2500	+ \$3000
<b>1080</b>	DBR Low Power Chip	\$2750	40 - 180	+ \$700	+ \$700	+ \$150	+ \$100	+ \$500	+ \$500	+ \$2500	+ \$3000
<b>1083.33 (He*)</b>	DBR Low Power Chip	\$2750	40 - 120	+ \$700	+ \$700	+ \$150	+ \$100	+ \$500	+ \$500	+ \$2500	+ \$3000
<b>1090</b>	DBR Low Power Chip	\$2750	40 - 180	+ \$700	+ \$700	+ \$150	+ \$100	+ \$500	+ \$500	+ \$2500	+ \$3000

# HOT DBR LASER DIODES

Our Photodigm High Operating Temperature (HOT) DBR laser diodes continue to deliver optimal performance at  $65^{\circ}\text{C} \pm 10^{\circ}\text{C}$  at key Alkali-atom wavelengths for quantum sensing applications.

$\lambda$ (nm)	Chip Architecture	Chip on Submount List Price	CW Power Range (mW)	MOUNTING ADD-ONS		PACKAGING ADD-ONS					
				Mode Hop Free*	Virtual Point Source (VPS) Lens**	9MM	C-Mount	TO-8***	TOSA	Butterfly	Butterfly-ISO****
<b>780.241 (Rb)</b>	DBR HOT Chip	\$4250	10 - 30	-	+ \$700	+ \$150	+ \$100	+ \$500	+ \$500	+ \$2500	-
<b>794.978 (Rb)</b>	DBR HOT Chip	\$4250	10 - 30	-	+ \$700	+ \$150	+ \$100	+ \$500	+ \$500	+ \$2500	-
<b>852.347 (Cs)</b>	DBR HOT Chip	\$4250	10 - 30	-	+ \$700	+ \$150	+ \$100	+ \$500	+ \$500	+ \$2500	-

\* Mode-Hop Free Mounting cannot be combined with a 9MM package.

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# VIRTUAL POINT SOURCE (VPS) LENS

Photodigm's virtual point source (VPS) microlens provides an integrated laser diode optics solution to decrease astigmatism and improve the circularity of the DBR laser diode's single-mode spatial output beam.

- High efficiency in capturing the fast-axis divergence ( $\theta_{\perp}$ ) (>98%)
- Focus the beam to near-diffraction limited performance for applications including fiber-coupling with an external single aspheric lens
- Ideal collimation and coupling of light to external optics
- Achieve circularity of 1.0–1.2 (slow-axis ( $\theta_{\parallel}$ )/fast-axis ( $\theta_{\perp}$ ) diameter ratio)

$\lambda$ (nm)	Chip Architecture	Chip on Submount List Price	CW Power Range (mW)	MOUNTING ADD-ONS		PACKAGING ADD-ONS					
				Mode Hop Free*	Virtual Point Source (VPS) Lens**	9MM	C-Mount	TO-8***	TOSA	Butterfly	Butterfly-ISO****
<b>760</b>	DBR High Power Chip	\$3750	40 - 60	+ \$700	+ \$700	-	+ \$100	+ \$500	+ \$500	+ \$2500	+ \$3000
<b>766.700 (K)</b>	DBR High Power Chip	\$3750	40 - 80	+ \$700	+ \$700	-	+ \$100	+ \$500	+ \$500	+ \$2500	+ \$3000
<b>770.108 (K)</b>	DBR High Power Chip	\$3750	40 - 100	+ \$700	+ \$700	-	+ \$100	+ \$500	+ \$500	+ \$2500	+ \$3000
<b>776.061 (Rb)</b>	DBR High Power Chip	RFQ	40 - 120	+ \$700	+ \$700	-	+ \$100	+ \$500	+ \$500	+ \$2500	+ \$3000
<b>778.105 (Rb)</b>	DBR High Power Chip	\$3750	80 - 180	+ \$700	+ \$700	-	+ \$100	+ \$500	+ \$500	+ \$2500	+ \$3000
<b>780.241 (Rb)</b>	DBR HOT Chip	\$4250	10 - 30	-	+ \$700	+ \$150	+ \$100	+ \$500	+ \$500	+ \$2500	-
	DBR Low Power Chip	\$2750	40 - 80	+ \$700	+ \$700	+ \$150	+ \$100	+ \$500	+ \$500	+ \$2500	+ \$3000
	DBR High Power Chip	\$3750	80 - 180	+ \$700	+ \$700	-	+ \$100	+ \$500	+ \$500	+ \$2500	+ \$3000
<b>785</b>	DBR Low Power Chip	\$2750	40 - 80	+ \$700	+ \$700	+ \$150	+ \$100	+ \$500	+ \$500	+ \$2500	-
	DBR High Power Chip	\$3750	80 - 180	+ \$700	+ \$700	-	+ \$100	+ \$500	+ \$500	+ \$2500	+ \$3000
<b>794.978 (Rb)</b>	DBR HOT Chip	\$4250	10 - 30	-	+ \$700	+ \$150	+ \$100	+ \$500	+ \$500	+ \$2500	-
	DBR Low Power Chip	\$2750	40 - 80	+ \$700	+ \$700	+ \$150	+ \$100	+ \$500	+ \$500	+ \$2500	+ \$3000
	DBR High Power Chip	\$3750	80 - 180	+ \$700	+ \$700	-	+ \$100	+ \$500	+ \$500	+ \$2500	+ \$3000
<b>800</b>	DBR High Power Chip	\$3750	80 - 180	+ \$700	+ \$700	-	+ \$100	+ \$500	+ \$500	+ \$2500	+ \$3000
<b>828</b>	DBR High Power Chip	\$3750	80 - 180	+ \$700	+ \$700	-	+ \$100	+ \$500	+ \$500	+ \$2500	+ \$3000
<b>830</b>	DBR High Power Chip	\$3750	80 - 180	+ \$700	+ \$700	-	+ \$100	+ \$500	+ \$500	+ \$2500	+ \$3000
<b>845.584 (Ca)</b>	DBR High Power Chip	\$3750	80 - 240	+ \$700	+ \$700	-	+ \$100	+ \$500	+ \$500	+ \$2500	+ \$3000
<b>852.347 (Cs)</b>	DBR HOT Chip	\$4250	10 - 30	-	+ \$700	+ \$150	+ \$100	+ \$500	+ \$500	+ \$2500	-
	DBR Low Power Chip	\$2750	40 - 80	+ \$700	+ \$700	+ \$150	+ \$100	+ \$500	+ \$500	+ \$2500	+ \$3000
	DBR High Power Chip	\$3750	80 - 240	+ \$700	+ \$700	-	+ \$100	+ \$500	+ \$500	+ \$2500	+ \$3000
<b>854.209 (Ca+)</b>	DBR High Power Chip	\$3750	80 - 240	+ \$700	+ \$700	-	+ \$100	+ \$500	+ \$500	+ \$2500	+ \$3000
<b>866.214 (Ca+)</b>	DBR High Power Chip	\$3750	80 - 240	+ \$700	+ \$700	-	+ \$100	+ \$500	+ \$500	+ \$2500	+ \$3000
<b>894.592 (Cs)</b>	DBR Low Power Chip	\$2750	40 - 120	+ \$700	+ \$700	+ \$150	+ \$100	+ \$500	+ \$500	+ \$2500	-
	DBR High Power Chip	\$3750	80 - 240	+ \$700	+ \$700	-	+ \$100	+ \$500	+ \$500	+ \$2500	+ \$3000
<b>1064</b>	DBR Low Power Chip	\$2750	40 - 180	+ \$700	+ \$700	+ \$150	+ \$100	+ \$500	+ \$500	+ \$2500	+ \$3000
<b>1080</b>	DBR Low Power Chip	\$2750	40 - 180	+ \$700	+ \$700	+ \$150	+ \$100	+ \$500	+ \$500	+ \$2500	+ \$3000
<b>1083.33 (He*)</b>	DBR Low Power Chip	\$2750	40 - 120	+ \$700	+ \$700	+ \$150	+ \$100	+ \$500	+ \$500	+ \$2500	+ \$3000
<b>1090</b>	DBR Low Power Chip	\$2750	40 - 180	+ \$700	+ \$700	+ \$150	+ \$100	+ \$500	+ \$500	+ \$2500	+ \$3000

\* Mode-Hop Free Mounting cannot be combined with a 9MM package.

\*\*Virtual Point Source (VPS) Lens only available 760–800 nm and 828–894.592 nm Chips. VPS is also available in 1064–1090 nm Low Power Chips. Additional coatings are available with NRE. A VPS Lens cannot be combined with a 9MM, Butterfly, or Butterfly-ISO package.

\*\*\*Hermetic Sealing is standard on our 9MM, TOSA, and Butterfly add-on packages. The TO-8 package can be hermetically sealed for an additional \$100/per unit. Ask Photodigm Sales for details on batch timing and expedited options, additional costs may apply.

\*\*\*\*The Butterfly-ISO package add-on cost is a pass-through free from THORLABS, our third-party vendor. A Butterfly-ISO package drastically impacts the power range of the device, so request adjusted power levels from Photodigm Sales.

Photodigm Spectroscopy Certified wavelengths are guaranteed to be tunable to the relevant spectroscopy line at 25 °C ± 10 °C.



# CONTACT US

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Photodigm, Inc.  
1155 E. Collins Blvd, Suite 200  
Richardson, Texas 75081

972-235-7584  
Sales@Photodigm.com  
Photodigm.com

 @Photodigm

 @PhotodigmInc