972-235-7584

Photodigm

GET A QUOTE

808 nm Laser Diode, Single Frequency DBR

808 nm Laser Diode

808 nm Laser Diode, Single Frequency DBR

Technology

- DBR Single-Frequency Laser Chip
- InGaAs QW Active Layer
- Epi designed for high reliability

Features

- Available in several package styles
- Pulsed operation for spectral stability at short pulse lengths
- High power for CW applications
- High Slope Efficiency

Description

The PH808DBR Series of high-power edge-emitting lasers are based on Photodigm's advanced single-frequency laser technology. The 808 nm laser diode is a DBR that provides a diffraction limited, single lateral and longitudinal mode beam. Facets are passivated for high-power reliability. Devices used in medical diagnostics, solid state laser pumping, and metrology applications.

Absolute Maximum Rating

Parameter	Symbol	Unit	Min	Max
Storage Temperature	T_{STG}	°C	0	80
Operating Temperature	T_{OP}	°C	5.0	70
CW Laser Forward Current, $T=T_{op}$	I_F	mA	-	**
Pulsed Laser Forward Current, T=25°C, PW=300 ns, DC=10%	I_F	A	-	0.5
Laser Reverse Voltage	V_R	V	-	0.0
Photodiode Forward Current 1/2/	I_P	mA	-	5.0
Photodiode Reverse Voltage 1/2/	V_R	V	-	20.0

Photodiode Dark Current, V_R=10V, LD I_F=0, 1/2/	I_D	nA	-	50
TEC Current 1/2/	I_{TEC}	A	-2.5	2.5
TEC Voltage 1/2/	V_{TEC}	V	-6.0	6.0
Thermistor Current 1/2/	I_{THRM}	mA	-	1.0
Thermistor Voltage 1/2/	V_{THRM}	V	-	10
ESD (HBM)	-	V	-	500
External Back Reflection	-	dB	-	-14
Lead Soldering Temperature, 10 sec. Max., 1/2/	-	°C	-	260
Fiber Pull Force 1/	-	N	-	5.0
Fiber Bend Radius 1/	-	mm		

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