

Diode Laser Concepts

DLC PN 511322-0008.1

Description

Laser Module; 0.75"; Industrial; Fine 60 Deg. Line; 635nm; Class II; Continuous Wave; No Leads; M12 Connector; 24VDC; RoHS

Laser Classification

Class II Laser Product

Key Features

- Laser Projection Type
 - Line
- Wavelength
 - 635 nm
- Optical Power
 - 3.3 mW
- Continuous Wave
- M12 Connector
- Custom drive circuit with photodiode feedback provides optical power stability
- Advanced Thermal Management
- Environmentally sealed package
- Passes IP66 Rating
- Environmentally tested under diverse conditions





Optical Specifications (At Case Temperature of 25°C)				
Specifications	Min.	Тур.	Max.	Units
Wavelength ^{1, 2}	630	637	640	nm
Wavelength Stability 1, 2, 3	-	0.25	-	nm/°C
Optical Power ⁴	2.9	3.3	3.7	mW
Optical Power Stability (Pk-Pk) ^{1, 5, 6}	-	-	2	%
Optical Power (Pk-Pk) over Temperature Range ^{1, 5, 7}	-	-	10	%
Beam Propagation ⁸		Collimated Line)	
Fan Angle	60	-	75	o
Line Thickness ^{1,9}	-	1.5	-	mm
Line Intensity Profile		Resembles Gauss	ian	
Pointing Accuracy ¹⁰	-	-	2	mrad
Window	Sapphire			
Emission Indicator	LED			

1. For reference only.

2. Based on manufacturer's specifications/reference documentation for laser diode component.

3. For stabilized laser conditions at case temperatures within operating temperature range.

4. Total Output Power measured at the face.

5. Base on testing of similar products.

6. Measured at working condition power at face over 60 minutes with a constant case temperature of 25°C and after a warm-up period of 10 minutes.

7. For stabilized laser conditions at case temperatures from 0°C to 45°C relative to working condition power at face (25°C case temperature).

8. Collimated beam using DLC standard metrology.

9. Measured at 1000mm at 0° of the fan angle.

10. Angular measurement from mechanical axis.



Electrical Specifications (At Case Temperatures of 25°C)				
Specifications	Min.	Тур.	Max.	Units
Operating Voltage	22	24	26	VDC
Load Current ^{1, 2, 3, 4}	-	15	150	mA
Case	Electrically Isolated			
Operation Mode	Continuous Wave			
Interconnect	M12 Connector			
Electronic Protection	Surge Protection Static Discharge Immunity (≥4kV [contact])			
 For reference only. For stabilized laser conditions at cas 	e temperatures within oper	ating temperature range.		

3. Based on production data.

4. Stated current maximum corresponds to inrush current.



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Environmental Specifications				
Specifications	Min.	Тур.	Max.	Units
Operating Temperature ^{1, 2}	-5	-	45	°C
Storage Temperature ²	-40	-	85	°C
 Refers to module's case temperature. Based on manufacturer's specifications/reference documentation for laser diode component. 				

Reliability / Regulatory Specifications			
Certifications	CE, RoHS Compliant, CDRH		
Laser Safety Label	Avoid Exposure EMITED RADIATION EMITED RADIATION EMITED RADIATION LASER RADIATION DOINT STARE INTO BEAM WAVELENGTH 400-700mm CLASS II LASER PRODUCT CONFORMS TO ALL WAVELENGTH 400-700mm CLASS II LASER PRODUCT CONFORMS TO ALL SUBCHAPTER J, 21 CFR CH.1. DIODE LASER CONCEPTS, INC. 227 CONMERCE DIVE MEDFORD, 08 1994 USA (541) 773-5321 (+) RED (-) BLACK		
Warranty	One Year		
Laser Lifetime ^{1, 2}	5000 Hours		
 For reference only. When operated in CW mode with a case temperature of 25°C. 			

Testing / Data Sheets / Labeling		
Thermal Bake Requirements	None	
Operational Burn-In Requirements	None	
Lot Data Report Requirements	None	
Identification Labeling ¹ Serialized Identification Label		
1. Refer to mechanical drawing for placement of labeling.		

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