



Diode Laser Concepts, Inc.

Product Specifications, Line
511322-0009 Rev 1

Doc Revision: 1
Status: Released
Date: 7/10/2018
Sheet 1 of 3

Rev.	Author	Revision History	Date
1	Shane Nelson	Specification Sheet Origination	July 10, 2018

Req.	Department	Approvals	Date
<input checked="" type="checkbox"/>	Engineering	Shane Nelson	July 10, 2018
<input checked="" type="checkbox"/>	General Management	Mike Robinson	July 10, 2018



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PRODUCT DESCRIPTION:	
Laser Module; 0.75"; Industrial; 90 Deg. Line; 635nm; LT 1mW; Class 2; Continuous Wave; No Leads; M12 Connector; 24VDC; RoHS	
OPTICAL SPECIFICATIONS (At 25°C)	
Wavelength:	635nm, $\pm 5\text{nm}$ ¹
Wavelength Stability:	0.25nm / °C ²
Power Output:	5.5mW, $\pm 1.0\text{mW}$ ³
Power Output Stability:	< 1% Fluctuations over 15 minutes ⁴
Power Output vs. Temperature:	< 1.0% / °C ²
Beam Propagation:	Collimated Line
Fan Angle:	90° ²
Line Thickness:	1.5mm ^{2,5} at 1m from front of module
	4mm ^{2,5} at 4m from front of module
	7mm ^{2,5} at 8m from front of module
Pointing Accuracy:	$\leq 2\text{mrad}$ ⁶
Window:	Sapphire
Emission Indicator:	Red
ELECTRICAL SPECIFICATIONS (At 25°C)	
Operating Voltage:	24VDC, $\pm 2\text{VDC}$
Typical Load Current:	10mA ²
Max. Load Current:	Inrush Max: 200mA Operating Max: 75mA
Operation Mode:	Continuous Wave Turn on Time: < 0.1sec
Interconnect:	M12 Lumberg Connector
Electronic Protection:	Reverse Polarity Protection Surge Protection Max Static Discharge Immunity: 4kV [contact]

ENVIRONMENTAL SPECIFICATIONS	
Operating Temperature:	-10 to 50 °C
Storage Temperature:	-40°C to 85 °C
Required Thermal Heat Dissipation:	0.5W
Dust and Water Protection:	IP54 ⁷
RELIABILITY / REGULATORY SPECIFICATIONS (At 25°C)	
Laser Lifetime (CW Mode):	> 16,000hrs ¹
Laser Safety Classification:	Class II Laser Product
Certifications:	CE, CDRH, RoHS Compliant
Warranty:	2 Year
TESTING / DATA SHEETS	
Data Sheet Requirements:	None

Notes

¹ Per laser diode manufacturer specification.

² Nominal specification.

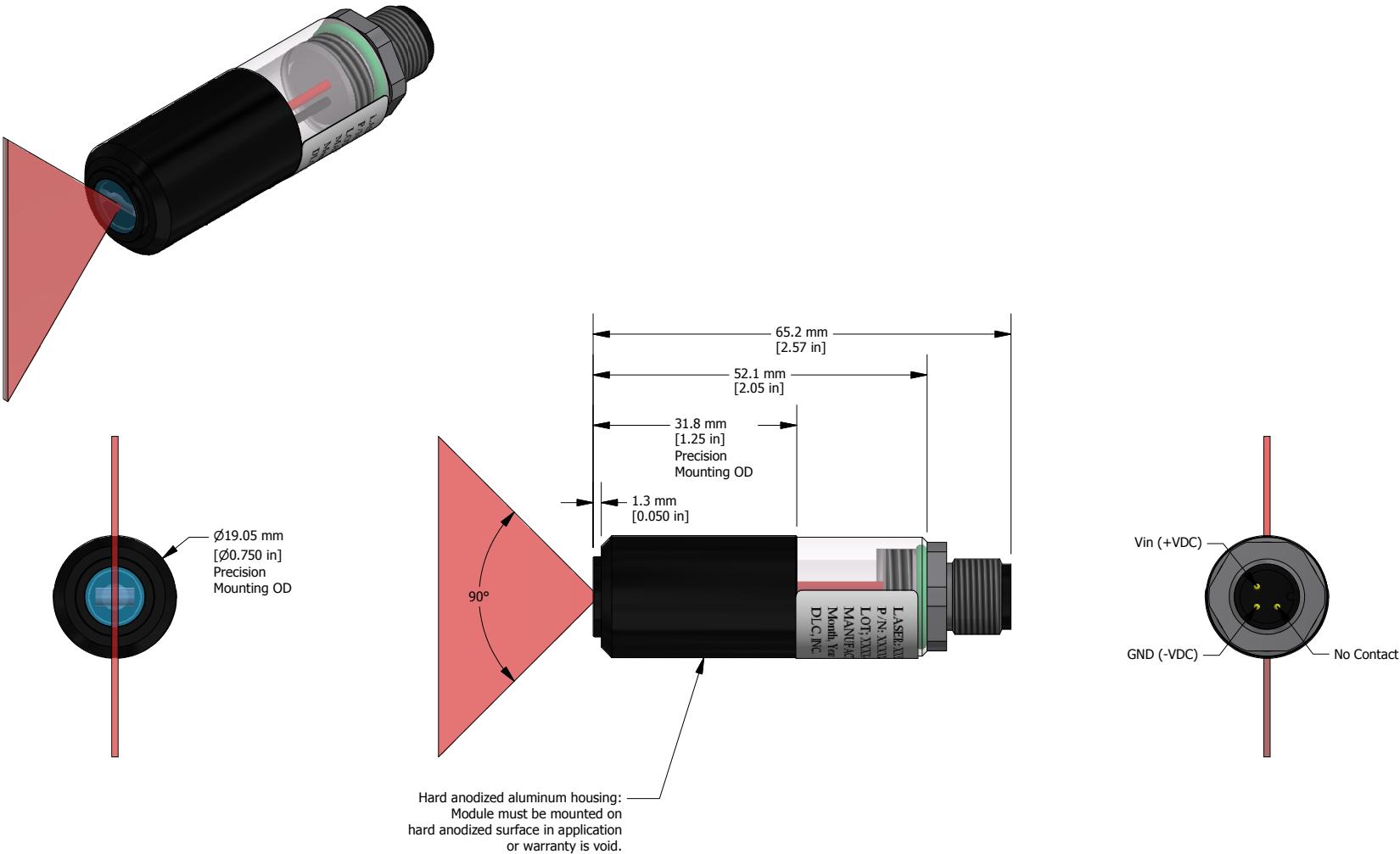
³ Total output power at face.


⁴ After laser warmup period.

⁵ Measured visually at center of line using standard rule.

⁶ Measured radially from mechanical, cylindrical axis normal to line length.

⁷ Designed to meet.



UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MILLIMETERS. X.X ± 0.2 mm (0.008") X.XX ± 0.10 mm (0.004") X.XXX ± 0.050 mm (0.002") Angular: ± 0.5 Degree	APPROVALS		DATE		DIODE LASER CONCEPTS, INC. 2027 Commerce Dr Medford, OR 97504 USA
	Drawn By:	Shane N.	6/19/2018		
	Approved By:	Mike R.	6/19/2018	Part Number:	511322-0009 Rev. 1
	Customer Approval	---		Description:	Laser Module; 0.75"; Industrial; 90 Deg. Line; 635nm; LT 1mW; Class 2; Continuous Wave; No Leads; M12 Connector; 24VDC; RoHS

Mouser Electronics

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