Product Revision History			
Rev.	**Author**	**Description**	**Date**
A	Jon C.	Document Origination	July 13, 2007
1	Shane Nelson	Update to New Format – (Non production revision)	March 23, 2018
1	Shane Nelson	Update Mechanical Specification – (Non production revision)	July 12, 2018
1	David Dutton	Update Mechanical Overall Length Specification, Tolerance on Length for Connector	December 6, 2018

Document Version History			
Ver.	**Author**	**Description**	**Date**
1	Shane Nelson	Update to New Format – (Non production revision)	March 23, 2018
2	Shane Nelson	Update Mechanical Specification – (Non production revision)	July 12, 2018
3	David Dutton	Update Mechanical Overall Length Specification, Tolerance on Length for Connector	December 6, 2018
4	David Dutton	Update Operating Temperature and Laser Lifetime	December 13, 2018

Req.	**Department**	**Approvals**	**Date**
☒	Engineering		
☒	General Management		

This material is considered proprietary and confidential to DLC and is not to be disclosed, copied or used as the basis for a design without written permission of DLC.

PRODUCT DESCRIPTION:	
Laser Module; 0.75"; Industrial; 45 Deg. Line; 635nm; LT 1mW; Class 2; Continuous Wave; No Leads; M12 Connector; RoHS	
OPTICAL SPECIFICATIONS (At 25°C)	
Wavelength:	635nm, ±5nm [1]
Wavelength Stability:	0.25nm / °C [2]
Power Output:	2.4mW, ±0.5mW [3]
Power Output Stability:	< 1% Fluctuations over 15 minutes [4]
Power Output vs. Temperature:	< 1.0% / °C [2]
Beam Propagation:	Collimated Line
Fan Angle:	45° [2]
Line Thickness:	2mm [2, 5] at 1m from front of module
	3mm [2, 5] at 4m from front of module
	6mm [2, 5] at 8m from front of module
Pointing Accuracy:	≤ 2mrads [6]
Window:	Sapphire
Emission Indicator:	Red
ELECTRICAL SPECIFICATIONS (At 25°C)	
Operating Voltage:	5VDC, ±0.5VDC
Typical Load Current:	60mA [2]
Max. Load Current:	75mA [2]
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]

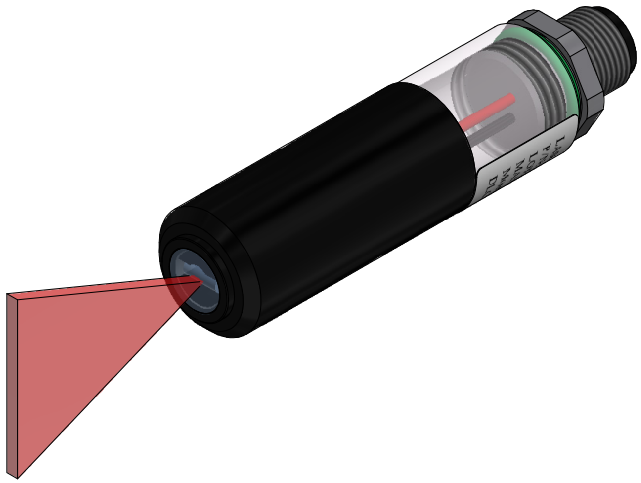
ENVIRONMENTAL SPECIFICATIONS	
Operating Temperature:	-10 to 50 °C
Storage Temperature:	-40°C to 85 °C
Required Thermal Heat Dissipation:	0.5W
Dust and Water Protection:	IP54 [7]
RELIABILITY / REGULATORY SPECIFICATIONS (At 25°C)	
Laser Lifetime (CW Mode):	> 10,000hrs [1]
Laser Safety Classification:	Class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

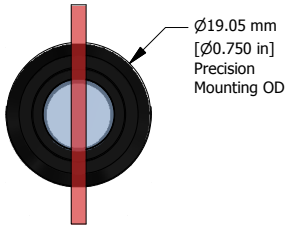
Notes

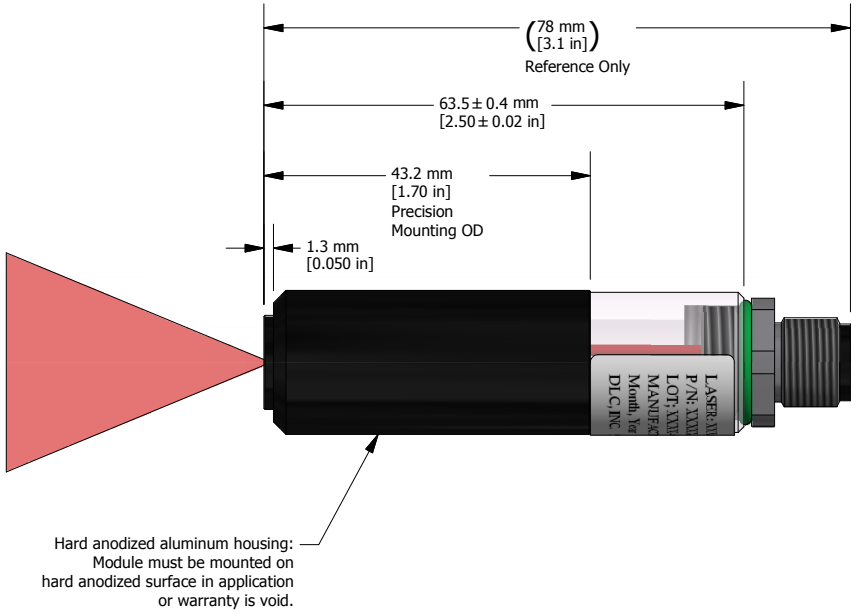
[1] Per laser diode manufacturer specification.
[2] Nominal specification.
[3] Total output power at face.
[4] After laser warmup period.
[5] Measured visually at center of line using standard rule.
[6] Measured radially from mechanical, cylindrical axis normal to line length.
[7] Designed to meet.

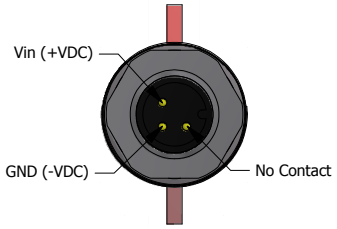
This material is considered proprietary and confidential to DLC and is not to be disclosed, copied or used as the basis for a design without written permission of DLC.

THIS MATERIAL IS PROPRIETARY AND CONFIDENTIAL TO DLC AND IS NOT TO BE DISCLOSED, COPIED OR USED AS THE BASIS FOR A DESIGN WITHOUT THE WRITTEN PERMISSION OF DLC.









Sheet 3 of 3

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MILLIMETERS.	APPROVALS	DATE	DIODE LASER CONCEPTS, INC.
X.X ± 0.2 mm (0.008")	Drawn By: Shane N.	12/6/2018	2027 Commerce Dr Medford, OR 97504 USA
X.XX ± 0.10 mm (0.004")	Approved By: Mike R.	12/6/2018	Part Number: 511322-0005 Rev. 1
X.XXX ± 0.050 mm (0.002")	Customer Approval ---		Description: Laser Module; 0.75"; Industrial; 45 Deg. Line; 635nm; LT 1mW; Class 2; Continuous Wave; No Leads; M12 Connector; RoHS
Angular: ± 0.5 Degree			