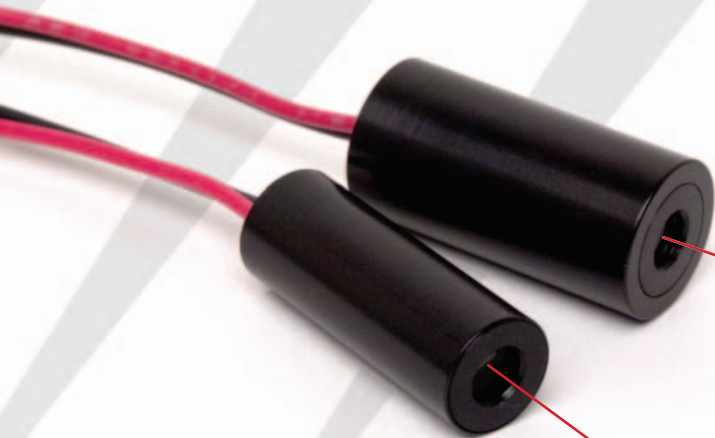


DLC's New High Performance Diode Laser Modules



- **Pointing Accuracy $<2\text{mrad}$**
- **Pointing Stability $<10\mu\text{rad}/^{\circ}\text{C}$**
- **Water and Dust Resistant**
- **Fully Customizable for OEM Applications**

These performance advances provide key advantages to the OEM customer:

- Reduced Fixturing/Labor Costs
- Increased OEM Product Performance
- Broader Application Base
- Unmatched Performance at a Competitive Price.



Diode Laser Concepts, Inc.

4731 Industry Drive - Central Point, OR 97502 USA

Tel: 541-773-5321 - Fax: 541-773-1705

Web: www.diodelaserconcepts.com

EXTERNAL HOUSING SPECIFICATIONS

Housing Dimensions	Ø9.5mm and Ø12.7mm Length: 25.4mm
Housing Material	Aluminum, Hard Anodized (Type III, Class 2 Anodization, Electrically Isolated)
Exit Aperture Protection	Sapphire Window
Customization	Dimensions, Materials, Exit Aperture Protection

ELECTRICAL SPECIFICATIONS

Operating Voltage	5VDC $\pm$ 1%
Load Current	25mA – 150mA (Laser Dependent)
Load Current vs. Temperature	0.7mA/°C Nominal
Continuous Wave (Standard Driver)	CW to 1kHz, Full Depth Modulation
TTL Modulation (Optional Driver)	CW to 1MHz, Full Depth Modulation
Electronic Protection	Reverse Polarity, Over Voltage, Surge Protection
Interconnect	175mm Nominal, 24AWG, UL1569
Customization	Operating Voltage, Interconnect

ENVIRONMENTAL SPECIFICATIONS

Operating Temperature	-10°C to 50°C
Storage Temperature	-40°C to 85°C
Static Contact Discharge Immunity	>12kV
Dust/Water Resistant	Yes (Sealed Housing)
Customization	Operating Temperature, Dust/Water Resistance

OPTICAL SPECIFICATIONS

Wavelength Range	635-830nm
Wavelength Stability	0.25nm/°C Nominal
Optical Power Range	1-30mW, Single Mode
Power Output Stability at 25C	<1%
Power Output vs. Temperature	<0.5%/°C Nominal
Exit Beam Size	5.0mmX1.2mm, 6.1mmX1.2mm
Beam Divergence	<0.7mrad Nominal, Varies with Optical Configuration
Standard Line Fan angles	10°, 30°, 45°, 60°, 90°
Line Thickness	1mm@1Meter Nominal
Line Thickness Divergence	<0.5mrad Nominal, Varies with Optical Configuration
Line Intensity Profile	Gaussian (Top Hat Profile Available Upon Request)
Lens Material	Glass
Customization	Wavelength, Power Output, Spot Size, Fan Angle, Line Thickness, Line Intensity Profile

POINTING SPECIFICATIONS

Accuracy	<2mrad
Stability vs. Temperature	<10µrad/°C
Customization	Accuracy

RELIABILITY/REGULATORY SPECIFICATIONS

Laser Lifetime	>30,000 hrs at 25°C
Certification/ Regulatory	CE/ CDRH
Warranty	2 Years

NOTE: Custom products may/may not conform to these specifications.



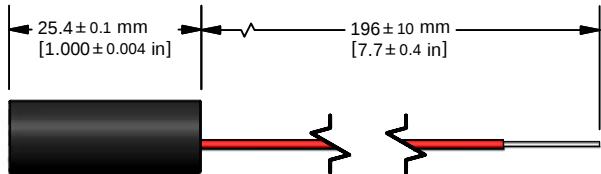
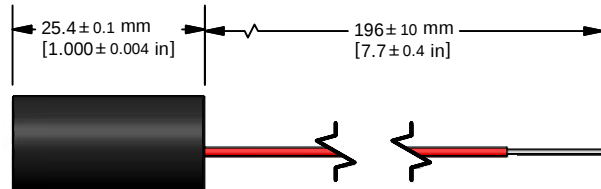
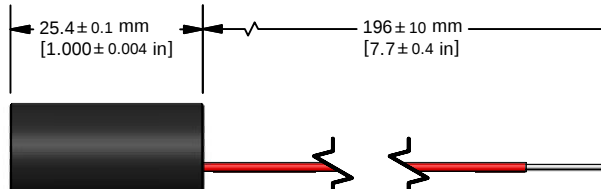
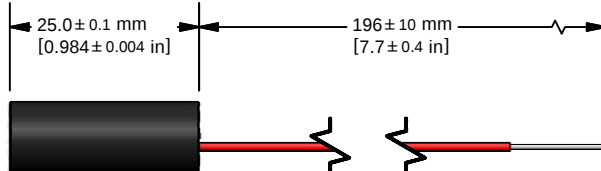
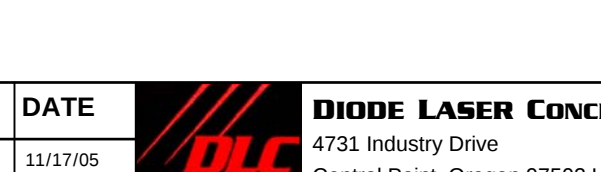
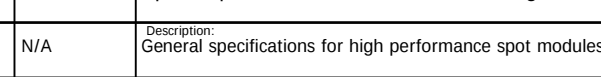
DIODE LASER CONCEPTS, INC.

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MECHANICAL SPECIFICATIONS		REVISION HISTORY																		
		REV	DESCRIPTION	DATE	APPROVED															
		1	Originate Document	11/17/2005	Zack S.															
Laser Material:	InGaAlP																			
Housing Material:	Aluminum* Type III Class 2 Black Anodized																			
Exit Aperture Protection:	Sapphire Window (Optional)																			
Lens Material:	Glass																			
OPTICAL SPECIFICATIONS																				
Wavelength (25°C):	Various within the range of 630nm - 830nm																			
Wavelength Stability	0.25nm / °C (Nominal)																			
Output Power (Exit Aperture):	0.97mW, 4.9mW, 20mW (Nominal)*																			
Output Power Stability (25°C):	<1% Fluctuation over 60 Minutes																			
Output Power vs. Temperature:	<0.5% / °C (Nominal)																			
Beam Size (At Exit Aperture):	0.85mm x 3.4mm, 1.2mm x 5.0mm, 1.5mm x 5.5mm (Nominal, varies with optical configuration and focus.)*																			
Beam Divergence:	Varies with optical configuration and focus.																			
Emissions Indicator:	Green LED																			
POINTING SPECIFICATIONS																				
Accuracy:	<2mrad																			
Stability vs. Temperature:	<10μrad / °C																			
ELECTRICAL SPECIFICATIONS																				
Operating Voltage:	5VDC Regulated +/- 1%*																			
Load Current –Typical at 25°C:	Varies with Output Power and Wavelength																			
Load Current –Max. at 25°C:	Varies with Output Power and Wavelength																			
Continuous Wave:	CW to 1kHz Full Depth Modulation* Turn on Time <0.1s *																			
Case:	Electrically Isolated																			
Electronic Protection:	Reverse Polarity Protection Over Voltage Protection Surge Protection																			
Interconnect:	24 AWG, UL1569* Red (+), Black (-)																			
ENVIRONMENTAL SPECIFICATIONS																				
Operating Temperature:	-10 to 50°C (60°C, 70°, 80°C) *																			
Storage Temperature:	-40°C to 85°C																			
Static Discharge Immunity:	>12Kv (Contact)																			
Dust/Water Resistance:	Yes																			
RELIABILITY/REGULATORY SPECIFICATIONS																				
Certifications:	CE CDRH Class Dependant Upon Output Power and Wavelength																			
RoHS compliance:	Beginning January 2006																			
Warranty:	2 Years																			
*Indicates Customization Available		<table><tr><th>APPROVALS</th><th>DATE</th><th rowspan="2"></th><th rowspan="2">DIODE LASER CONCEPTS, INC.</th></tr><tr><td>Drawn By: Zack S.</td><td>11/17/05</td><td>4731 Industry Drive Central Point, Oregon 97502 USA</td></tr><tr><td>Approved By: Mike R.</td><td>11/17/05</td><td colspan="2">Part Number: Specific part numbers are issued according to configuration.</td></tr><tr><td>Customer Approval: N/A</td><td>N/A</td><td colspan="2">Description: General specifications for high performance spot modules.</td></tr></table>				APPROVALS	DATE		DIODE LASER CONCEPTS, INC.	Drawn By: Zack S.	11/17/05	4731 Industry Drive Central Point, Oregon 97502 USA	Approved By: Mike R.	11/17/05	Part Number: Specific part numbers are issued according to configuration.		Customer Approval: N/A	N/A	Description: General specifications for high performance spot modules.	
APPROVALS	DATE		DIODE LASER CONCEPTS, INC.																	
Drawn By: Zack S.	11/17/05			4731 Industry Drive Central Point, Oregon 97502 USA																
Approved By: Mike R.	11/17/05	Part Number: Specific part numbers are issued according to configuration.																		
Customer Approval: N/A	N/A	Description: General specifications for high performance spot modules.																		

MECHANICAL SPECIFICATIONS

Laser Material: InGaAlP
Housing Material: Aluminum*
Type III Class 2 Black Anodized
Exit Aperture Protection: Sapphire Window
Lens Material: Glass

OPTICAL SPECIFICATIONS

Wavelength (25°C): Various within the range of 630nm - 830nm
Wavelength Stability: 0.25nm / °C (Nominal)
Output Power (Exit Aperture): 0.97mW, 4.9mW, 20mW (Nominal)*
Output Power Stability (25°C): <1% Fluctuation over 60 Minutes
Output Power vs. Temperature: <0.5% / °C (Nominal)
Fan Angle: 45°, 70°, 90° (Nominal) *
Line Thickness : 1mm nominal (Measured at Face)
Line Intensity Profile: Gaussian
Emissions Indicator: Green LED

POINTING SPECIFICATIONS

Accuracy: <2mrad
Stability vs. Temperature: <10μrad / °C

ELECTRICAL SPECIFICATIONS

Operating Voltage: 5VDC Regulated +/- 1%*
Load Current –Typical at 25°C: Varies with Output Power and Wavelength
Load Current –Max. at 25°C: Varies with Output Power and Wavelength
Continuous Wave: CW to 1kHz Full Depth Modulation*
Turn on Time <0.1s*
Case: Electrically Isolated
Electronic Protection: Reverse Polarity Protection
Over Voltage Protection
Surge Protection
Interconnect: 24 AWG, UL1569*
Red (+), Black (-)

ENVIRONMENTAL SPECIFICATIONS

Operating Temperature: -10 to 50°C (60°C, 70°, 80°C) *
Storage Temperature: -40°C to 85°C
Static Discharge Immunity: >12Kv (Contact)
Dust/Water Resistance: Yes

RELIABILITY/REGULATORY SPECIFICATIONS

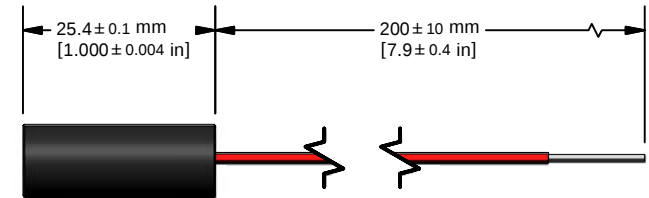
Certifications: CE
CDRH Class Dependant Upon Output Power and Wavelength
RoHS compliance: Beginning January 2006
Warranty: 2 Years

*Indicates Customization Available

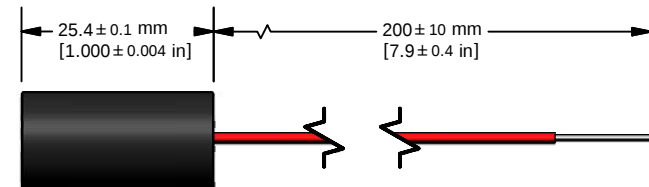
REVISION HISTORY

REV	DESCRIPTION	DATE	APPROVED
1	Originate Document	11/17/2005	Zack S.

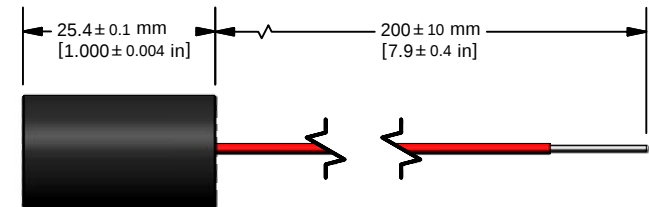
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[0.3750 ^{+0.0004}/_{-0.0020} in]



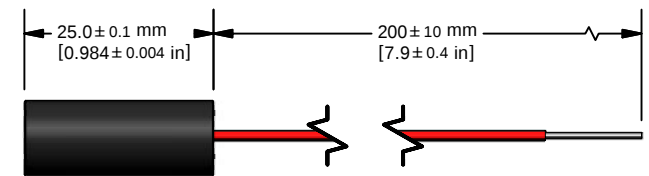
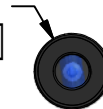
Ø12.70 ^{+0.01}/_{-0.05} mm
[0.5000 ^{+0.0004}/_{-0.0020} in]



Ø14.73 ^{+0.01}/_{-0.05} mm
[0.5800 ^{+0.0004}/_{-0.0020} in]



Ø10.00 ^{+0.01}/_{-0.05} mm
[0.3937 ^{+0.0004}/_{-0.0020} in]

**APPROVALS****DATE****DIODE LASER CONCEPTS, INC.**

Drawn By:
Zack S.

11/17/05

4731 Industry Drive
Central Point, Oregon 97502 USA

Approved By:
Mike R.

11/17/05

Part Number:
Specific part numbers are issued according to configuration.

Customer Approval:
N/A

N/A

Description:
General specifications for high performance line generator modules.



Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



Как с нами связаться

Телефон: 8 (812) 309 58 32 (многоканальный)

Факс: 8 (812) 320-02-42

Электронная почта: org@eplast1.ru

Адрес: 198099, г. Санкт-Петербург, ул. Калинина, дом 2, корпус 4, литера А.