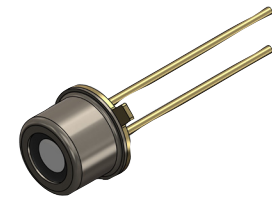
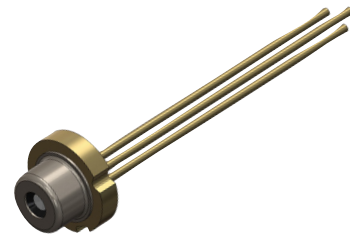


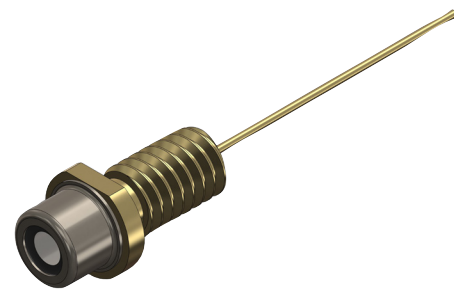
PRODUCT OVERVIEW



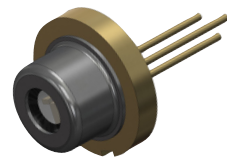
TO18 Twin Header with Window Cap



3 Pin TO56 with Window Cap

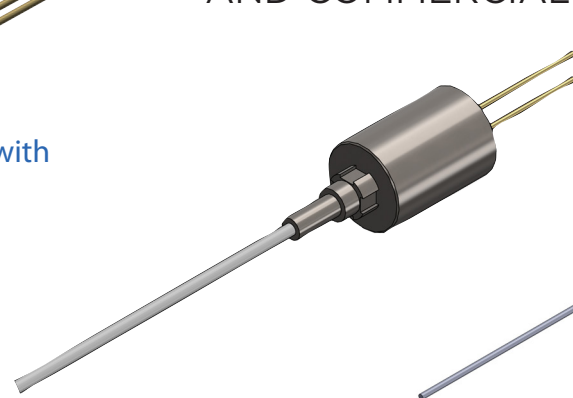


TO18C with Window Cap

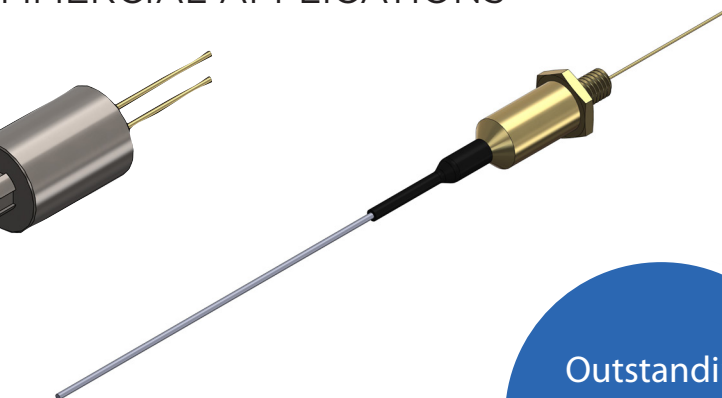


9mm Header with Window Cap

DESIGNED AND DEVELOPED FOR MILITARY AND COMMERCIAL APPLICATIONS



TO18F Package



TO5F Package

Outstanding Performance and Service



Products can be ordered directly from OSI Laser Diode Inc. or it's representatives. For a complete listing of representatives, visit our website at:

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**Safety:**

Caution: Laser light emitted from any diode laser may be harmful to the human eye. Avoid looking directly into the diode laser aperture when the device is in operation.

**ESD Caution:**

Handle diode lasers with extreme care to prevent electrostatic discharge. Follow ESD precautions when handling devices.

**Warranty:**

Please refer to your product purchase agreement for complete details or check with your OSI Laser Diode sales representative.

**Notice:**

OSI Laser Diode Inc. reserves the right to make changes to the products or information contained herein without notice. No liability is assumed as a result of their use or application.

# World Class Opto-Electronic Components



Applications / Market

Rangefinding • Ceilometers • Weapons Simulation • Surveying Equipment • Hunting • Targeting • Homeland Security  
LIDAR • Adaptive Cruise Control • Proximity Fuses

## High Power Pulsed Laser Diodes

CVD Series Characteristics @ 25°C

Parameters	Symbol	Min	Typ	Max	Units
Beam Spread	FWHM		10 x 24		Degrees
Peak wavelength	$\lambda$				nm
CVD 60 / 160 Series	$\lambda$	895	905	915	nm
CVD 90 / 190 Series	$\lambda$	840	850	860	nm
CVD 206 Series	$\lambda$	850	860	870	nm

CVD 905nm Series Test Conditions: 100ns, 25°C

Parameters	CVD 40	CVD 46	CVD 60	CVD 62	CVD 65	CVD 68	CVD 163	CVD 165	CVD 167	Units
Peak Power	2	3	4	8	13	22	35	60	100	Watts
Number of Diodes	1	1	1	1	1	1	3	3	5	
Emitting Area Typical	40 x 1	62 x 1	76 x 1	152 x 1	254 x 1	381 x 1	254 x 203	381 x 203	381 x 406	um
Forward Current If	2.6	4	5	10	15	25	15	25	25	Amps

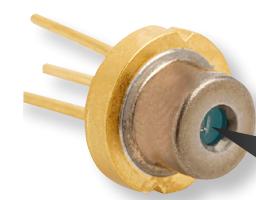
CVD 850nm Series Test Conditions: 100ns, 25°C

Parameters	CVD 90	CVD 93	CVD 95	CVD 97	CVD 193	CVD 195	CVD 197	CVD 206	Units
Peak Power	5	10	15	25	40	60	100	40	Watts
Number of Diodes	1	1	1	1	3	3	5	8 <sup>2</sup>	
Emitting Area Typical	76 x 1	152 x 1	254 x 1	350 x 1	254 x 203	381 x 203	381 x 406	2134 x 1	um
Peak If	7	14	20	30	20	30	30	60	Amps

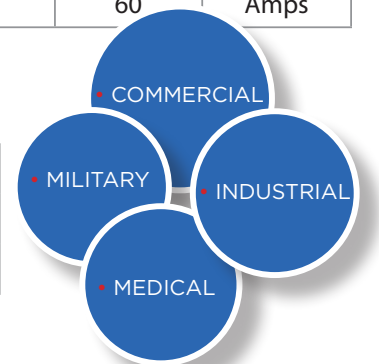
## CVN 63-90ECL

CVN Series Drive Conditions: 100ns 30Amps 1kHz @ 25°C

Parameters	Symbol	Min	Typ	Max	Units
Wavelength	$\lambda$	893	903	913	nm
Peak Power	P <sub>o</sub>	85			W



Beam Divergence Equivalent in both Axes



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## High Power Monolithic Stack Pulsed Laser Diode

CVN Series Drive Conditions: 100ns 30Amps 1kHz @ 25°C

Parameters	Symbol	Min	Typ	Max	Units
Peak wavelength	$\lambda$	893	903	913	nm
Beam Spread	FWHM		8 x 25		degrees

Other Parameters: Peak Power at 25°C (typ)

Parameters	Symbol	CVN 63	CVN 2563	CVN 3563	CVN 4563	CVN 5563	Units
Peak Forward Current	$I_f$	30	30	30	30	30	Amps
Emitting Area		200 x 10	200 x 120	200 x 240	200 x 360	200 x 480	Microns
Peak Power (typ)	$P_f$	90	180	270	360	450	W

## CVLL 350-CL90

1550nm Pulsed Laser Diode with Intergrated Micro lens 75A @ 25°C

Parameters	Symbol	Min	Typ	Max	Units
Wavelength	$\lambda$	1530	1550	1580	nm
Peak Power	$P_o$		22		W

## 1550nm High Brightness Pulsed Laser Diodes

CVLL Series Specifications and Limits @ 25°C

Parameters	Symbol	Min	Typ	Max	Units
Peak Wavelength	$\lambda$	1530	1550	1580	nm
Beam Spread	FWHM		10 x 24		degrees

CVLL Series Test Conditions: Pulse width = 150ns, Rep. Rate = 5kHz, 25°C

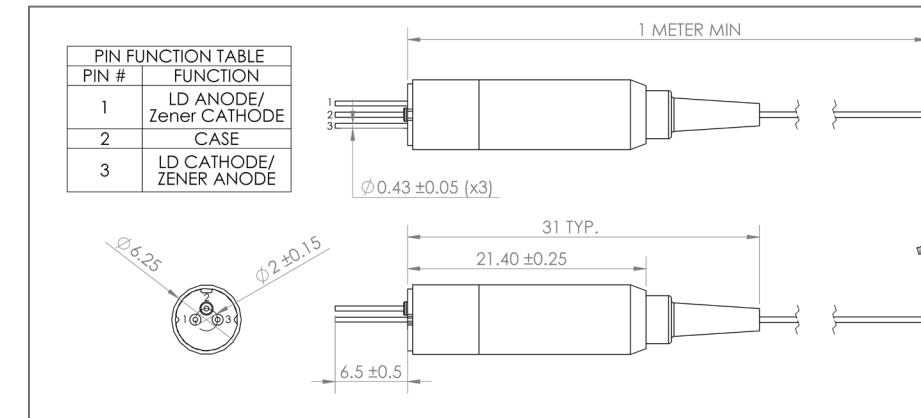
Parameters	Symbol	CVLL 95	CVLL 2595	CVLL 3595	CVLL 4595	CVLL 5595	CVLL 350	CVLL 25350	CVLL 35350	CVLL 45350	CVLL 55350	Unit
Peak Power (min)	$P_o$	10	20	30	40	50	25	50	75	100	125	Watts
Peak Power (Fiber)	$P_f$	5	10	15	20	25	12	25	37	50	62	
Peak Forward Current	$I_f$	30	30	30	30	30	75	75	75	75	75	Amps
Number of Diodes		1	2	3	4	5	1	2	3	4	5	
Emitting Area (typ)		95 x 1	95 x 180	95 x 360	95 x 540	95 x 720	350 x 1	350 x 180	350 x 360	350 x 540	350 x 720	um

## CVB 450-TO56R 25°C @ 2A

Characteristics (Tamb = 25°C. unless otherwise specified)

Peak optical power (ex-fiber)	Symbol	Conditions	Min	Typ	Max	Units
Peak optical power (ex-fiber)	$P_o$	$I_f = 2000 \text{ mA}; P_w = 1 \text{ us}; d/C = .01\%$	2			W
Center wavelength	$\lambda$	$I_f = 2000 \text{ mA}; P_w = 1 \text{ us}; d/C = .01\%$	440	450	460	nm
Fiber Type	Step Index 200um SiO <sub>2</sub> core / 230um HPC / 500um Tefzel					

For Metrology, Particle scanning and Optical Measurements



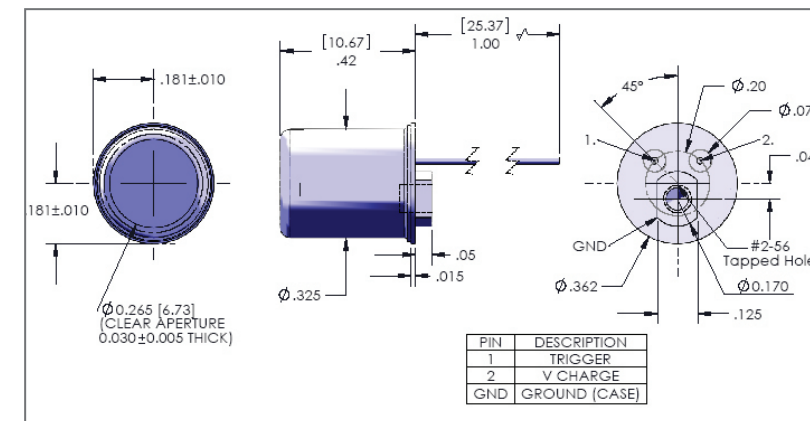
## Hybrid Laser Diodes for Pulsed Operations

LHCVN Series Test Conditions: Rep. Rate= 1kHz, @ 25°C

Parameters	LHCVN63-10	LHCVN5563-10	LHCVN5563-30	Units
Power (Min)	20	200	350	W

LHCVN Series Specifications and Limits @ 25°C

Parameters	Symbol	Min	Typ	Max	Units
Wavelength	$\lambda$	895	905	915	nm



OSI Laser Diodes' principles of Leadership, Dependability and Integrity, delivers a high standard of service and quality products

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