

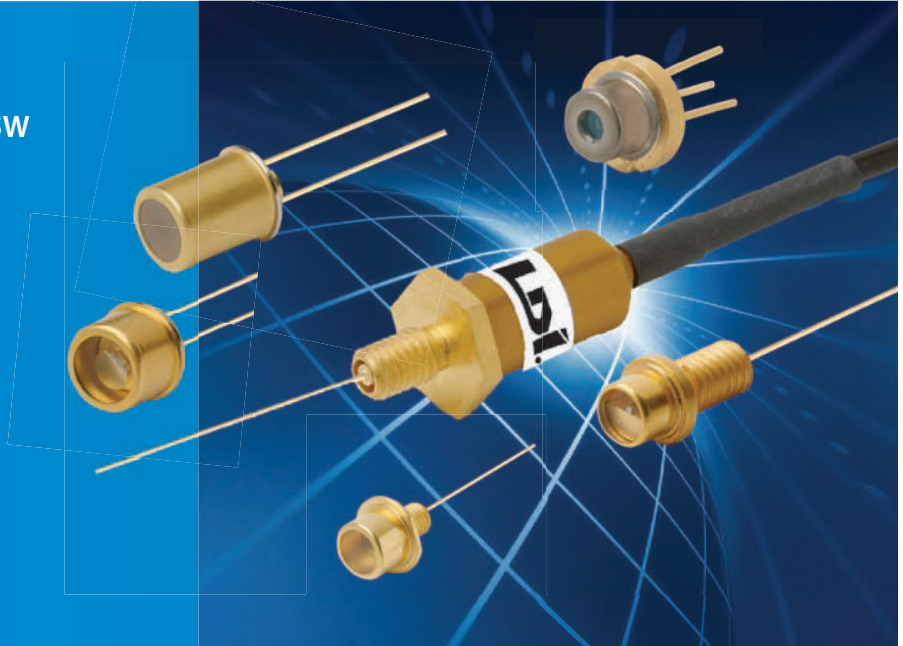
## High Power Monolithic Stack Pulsed Laser Diodes

ISO 9001:2008 Certified

High Reliability/High Efficiency  
 Stable Output from -40°C to +85°C  
 Single & Stacked Devices up to 375W  
 Fiber Coupled Devices up to 188W  
 Custom Packaging Available

### Applications:

- Rangefinding
- Ceilometers
- Weapons Simulation
- Surveying Equipment
- Homeland Security
- LIDAR
- Adaptive Cruise Control



### CVN Series

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

PARAMETERS	Symbol	Min	Typ	Max	Units
Peak Wavelength	$\lambda$	895	905	915	nm
Spectral Width	$\Delta\lambda$		8		nm
Rise Time	$T_r$		1		ns
Beam Spread			9 x 25		Degrees
Duty Cycle	DC			0.1	Percent
Operating Temperature	$T_{op}$	-40		85	°C
Storage Temperature	$T_{stg}$	-40		85	°C

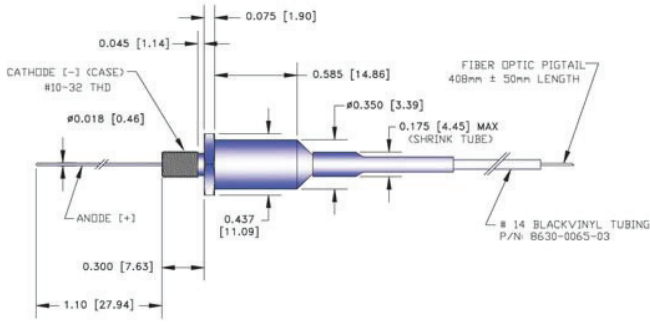
PARAMETERS	Symbol	CVN 63	CVN 2S63	CVN 3S63	CVN 4S63	CVN 5S63	Units
Threshold Current (typ)	$I_{th}$	0.8	0.8	0.8	0.8	0.8	A
Peak Forward Current	$I_f$	30	30	30	30	30	A
Peak Power 25°C (typ)	$P_o$	75	150	225	300	375	W
Peak Power 85°C (typ)	$P_o$	60	120	180	240	300	W
Emitting Area		200 x 10	200 x 120	200 x 240	200 x 360	200 x 480	Microns
Fiber Core Diameter*		200	300	300	400	600	Microns
Power from Fiber (typ)	$P_f$	38	75	112	150	188	W

Notes: All devices supplied case (-) unless otherwise specified.

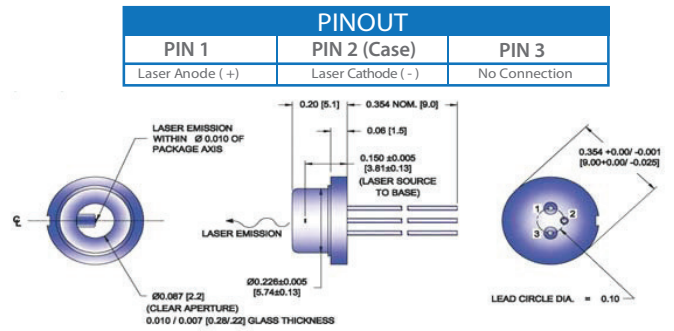
\*Note: Other fiber sizes are available

## Package Drawings

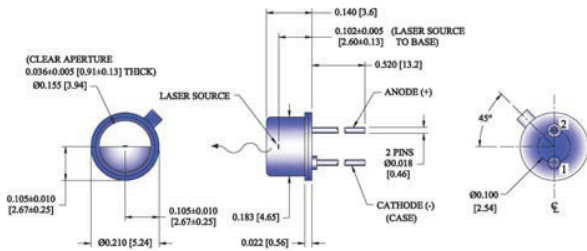
### TO5F (Non-Hermetic) Package



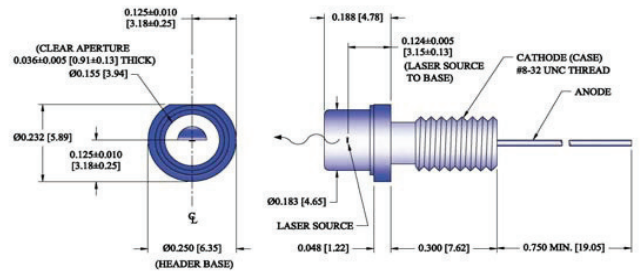
### 9 mm Package



### TO18T Package

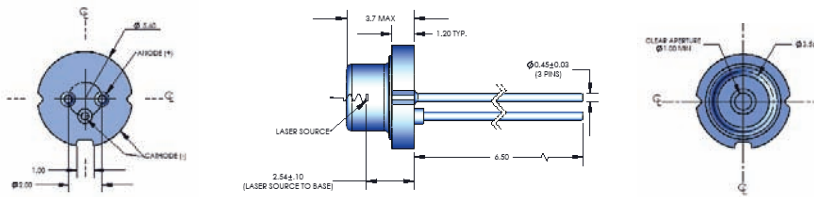


### TO18C Package



Other package options available. Dimensions: inches [mm]

### 5.6 mm Package



Available with Single Chip Only

## Ordering Information

When ordering, refer to the numbering diagram below.

CVN

XS

63-

XXX

#Stacked

- 2
- 3
- 4
- 5

Package

- TO5C = Coax
- TO5T = Twin
- TO5F = Fibered
- TO18C = Coax
- TO18T = Twin
- 90 = 9mm
- 56 = 5.6mm

**Note:** Fiber length is 1 meter +/- 0.1 meter unless otherwise noted. Output is typically 50% of rated power for fibered products.

Products can be ordered directly from OSI Laser Diode Inc. or its representatives.

For a complete listing of representatives, visit our website at

[www.laserdiode.com](http://www.laserdiode.com)

**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.

**Class 3B laser**

**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.

**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.