## **OSI** LaserDiode, Inc.

An OSI Systems Company

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### www.laserdiode.com

# 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

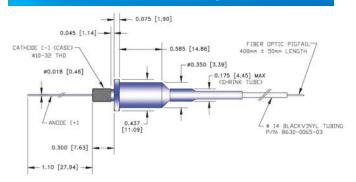
PARAMETERS	Symbol	Min	Тур	Max	Units
Peak Wavelength	λ	895	905	915	nm
Spectral Width	Δλ		8		nm
Rise Time	Tr		1		ns
Beam Spread			9 x 25		Degrees
Duty Cycle	DC			0.1	Percent
Operating Temperature	T <sub>op</sub>	-40		85	°C
Storage Temperature	$T_{stg}$	-40		85	°C

PARAMETERS	Symbol	CVN 63	CVN 2S63	CVN 3S63	CVN 4S63	CVN 5S63	Units
Threshold Current (typ)	Ith	0.8	0.8	0.8	0.8	0.8	Α
Peak Forward Current	l <sub>f</sub>	30	30	30	30	30	А
Peak Power 25°C (typ)	Po	75	150	225	300	375	W
Peak Power 85°C (typ)	Po	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

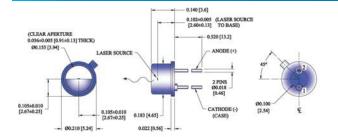
Notes: All devices supplied case (-) unless otherwise specified.

<sup>\*</sup>Note: Other fiber sizes are available

#### TO5F (Non-Hermetic) Package

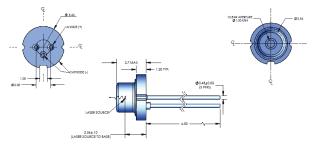


#### TO18T Package



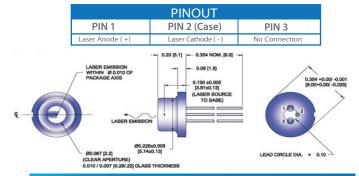
Other package options available. Dimensions: inches [mm]

#### 5.6 Package

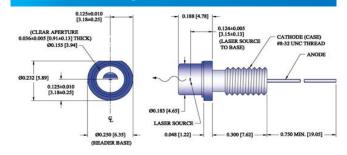


Available with Single Chip Only

#### 9 mm Package

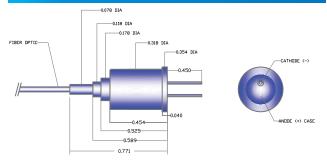


#### TO18TC Package



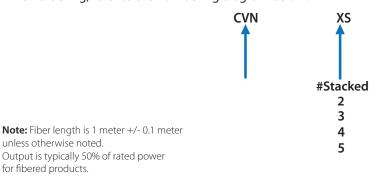
#### **TO18F Package**

63



#### **Ordering Information**

When ordering, refer to the numbering diagram below.



**ESD Caution:** 

Handle diode lasers with extreme care to

precautions when handling devices.

prevent electrostatic discharge. Follow ESD

#### 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

unless otherwise noted.

for fibered products.

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.



TO5C = CoaxTO5T = TwinTO5F = Fibered TO18C = Coax TO18T = Twin TO18F = **Fibered** 

90 = 9mm

#### Warranty:

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