Laserglow Product Datasheet

LCS-0532 Low-Cost DPSS Laser System

Laserglow Part Number: C53050X9X



Similar Products:

For information about the other lasers in this product family visit:

http://www.laserglow.com/C53

Ordering:

Order Online Now or Request Quote:

http://www.laserglow.com/C53050X9X

Series Specifications:

Nominal Wavelength	532 nm
Output Type	CW
Laser Source Type	DPSS

Overview:

The LCS-0532 Series of Diode-Pumped Solid-State (DPSS) Lasers are ideal for applications requiring up to 200 mW of 532 nm laser light at the lowest cost possible while maintaining high quality and a long operating life.

These lasers are commonly used for general illumination and fluorescence excitation. The driver is available as a complete FDA-compliant system or as an O.E.M. component with significantly reduced dimensions.

Laserglow products are currently being used by some of the World's top universities and other prominent research facilities.

Key Features:

- Air cooled - no need for water cooling or external chiller
- Lightweight, compact design
- Efficient DPSS technology runs on standard AC power (85 - 264 V, 47 - 63 Hz)
- Also available in 5/12 VDC power supply
- >5,000 hours continuous maintenance-free operating life
- 6 month warranty
- TTL modulation
- FDA CDRH Compliant Class IIIb / Class IV enclosure
- 48-hour replacement coverage available for an additional fee on specific models

Package Includes:

- Laser Head
- Driver/Power Supply
- Power Cable

- Detachable TTL wires (on applicable models)
- Keys, Safety Interlock (FDA power supplies only)
- Hard-shell Carrying Case

Specifications:

This spec sheet has been generated specifically for part number C53050X9X, per your request, and data for the entire series is also displayed for your reference. The specs which are specific to C53050X9X have been highlighted below in **red + bold**.

Output Power (mW)	>15, >35, **>50**	>80, >100
Output Power Stability (%RMS/4h)	<5, **<10**	<5, <10
Central Wavelength (nm)	**531.65**	531.65
Wavelength Tolerance (+/- nm)	**1**	1
Divergence (mrad, full angle)	**<1.2**	<1.2
Beam Dimensions (mm, 1/e²)	**1.5**	1.5
Warm-up Time (minutes)	**10**	10
Optical Noise Amplitude (%RMS @ 20 Hz - 20 MHz)	**<20**	<20
M^2	**<1.48**	<1.48
Beam Pointing Stability (mrad)	**<0.05**	<0.05
Operating Temperature Range (°C)	**10 to 35**	15 to 35
Max. TTL Modulation Freq. (Hz)	**10000**	10000
Modulation Input Signal	**0-5 VDC**	0-5 VDC
Total Power Consumption (W)	10	35
Max. Power Input Duty Cycle	**100%**	100%
Standard Warranty (months)	**6**	6
MTTF (operational hours)	**5000**	5000
Weight of Product or Laser Head (kg)	**0.2**	0.2
Beam Height from Base Plate (mm)	**15**	15
Dimensions of Product or Laser Head (mm)	**77 (l) x 30 (w) x 30 (h)**	87 (l) x 40 (w) x 40 (h)

CW: All specifications are based on performance at full output power and after the specified warmup period. Output characteristics may change if the laser is run at a different power level.
Q-Switched: Specifications are based on the laser pulsing at the specified design frequency. Output characteristics may change if the laser is run at a different frequency.

Power Supply Options:

These lasers are available with several different power supply options. The model that you have selected is highlighted below, and any other options are shown for easy reference.

	Power Supply Type:	**1C**	**1D**
OEM 12 Volt DC 	Input Power	0v to 12v	0v to 12v
	Power Supply Weight (kg)	0.2	0.2
	Dimensions (mm)	115 (l) x 59 (w) x 34 (h)	115 (l) x 59 (w) x 34 (h)

	Power Supply Type:	**5C**	**5D**
OEM 5 Volt DC 	Input Power	0v to 5v	0v to 5v
	Power Supply Weight (kg)	0.1	0.1
	Dimensions (mm)	110 (l) x 47 (w) x 30 (h)	110 (l) x 47 (w) x 30 (h)

	Power Supply Type:	**OC**	**OD**
OEM AC 	Input Power	**85v to 264v**	85v to 264v
	Power Supply Weight (kg)	**0.14**	0.14
	Dimensions (mm)	**90 (l) x 47 (w) x 37 (h)**	90 (l) x 47 (w) x 37 (h)

	Power Supply Type:	**SC**	**SD**
FDA-Compliant Standard 	Input Power	85v to 264v	85v to 264v
	Power Supply Weight (kg)	1.2	1.2
	Dimensions (mm)	133 (l) x 130 (w) x 65 (h)	133 (l) x 130 (w) x 65 (h)

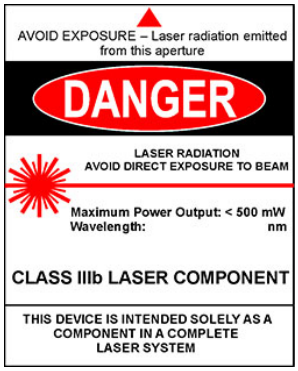
	Power Supply Type:	**DD**
OEM 5/12 Volt DC Image not found or type unknown	Input Power	5v to 12v
	Power Supply Weight (kg)	0.2
	Dimensions (mm)	115 (l) x 59 (w) x 34 (h)

*Power supply may not be exactly as shown, see dimensional drawings on next 2 pages.

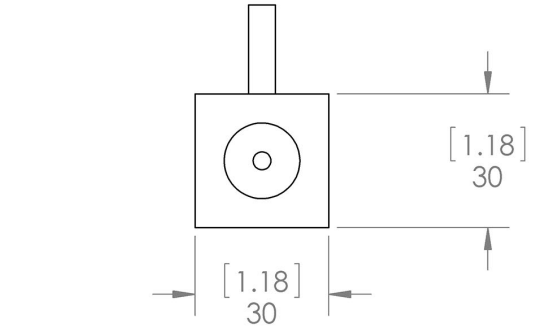
*Dimensions for fiber-integrated (I_) include laser head packaged inside.

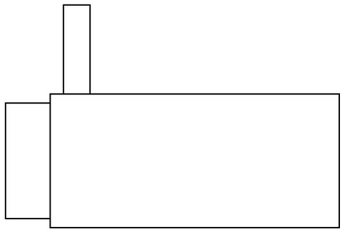
Regulatory Classification:

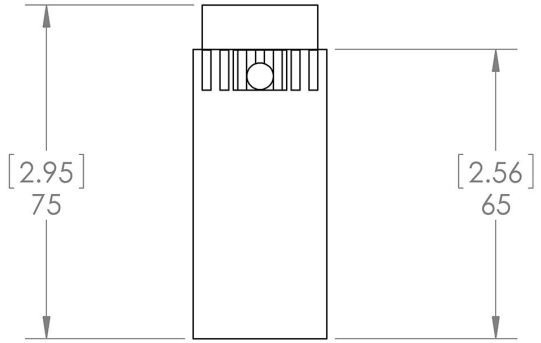
The model you have selected (C53050X9X) requires the following safety label(s):

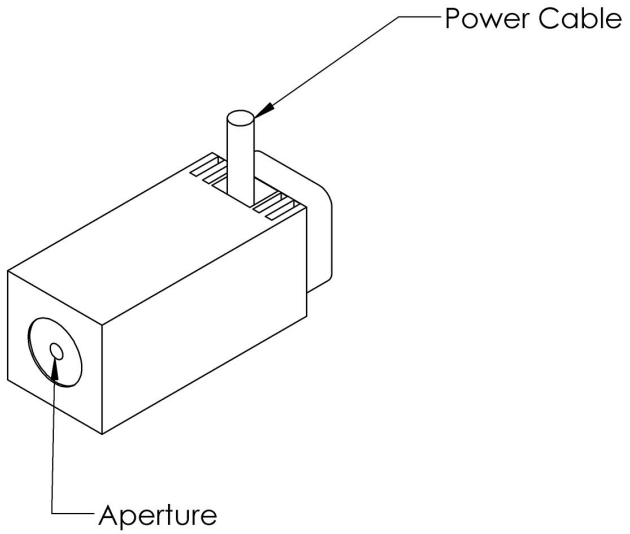

AVOID EXPOSURE – Laser radiation emitted from this aperture
DANGER
LASER RADIATION
AVOID DIRECT EXPOSURE TO BEAM
Maximum Power Output: < 500 mW
Wavelength: nm
CLASS IIIb LASER COMPONENT
THIS DEVICE IS INTENDED SOLELY AS A COMPONENT IN A COMPLETE LASER SYSTEM

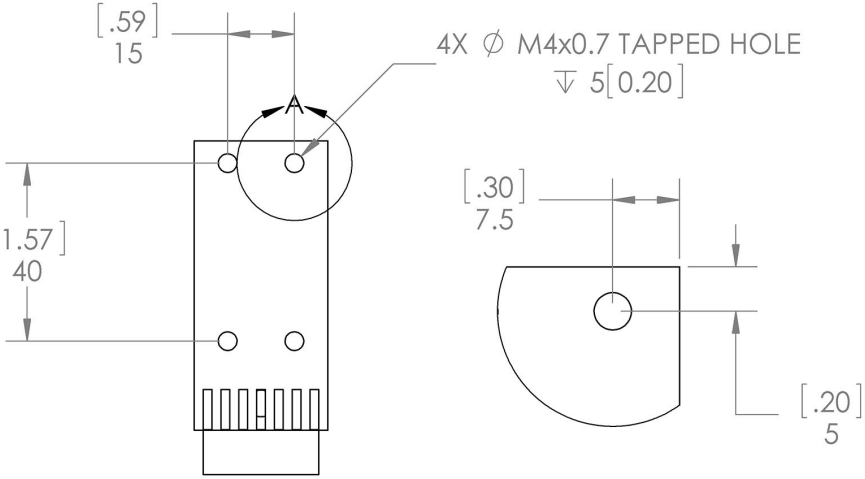
Dimensional Drawing - Laser Form Factor: C:











DETAIL A
SCALE 4 : 3

UNLESS OTHERWISE SPECIFIED:

DIMENSIONS ARE IN MM[INCH]
TOLERANCES: +/- 0.75 MM

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TITLE:

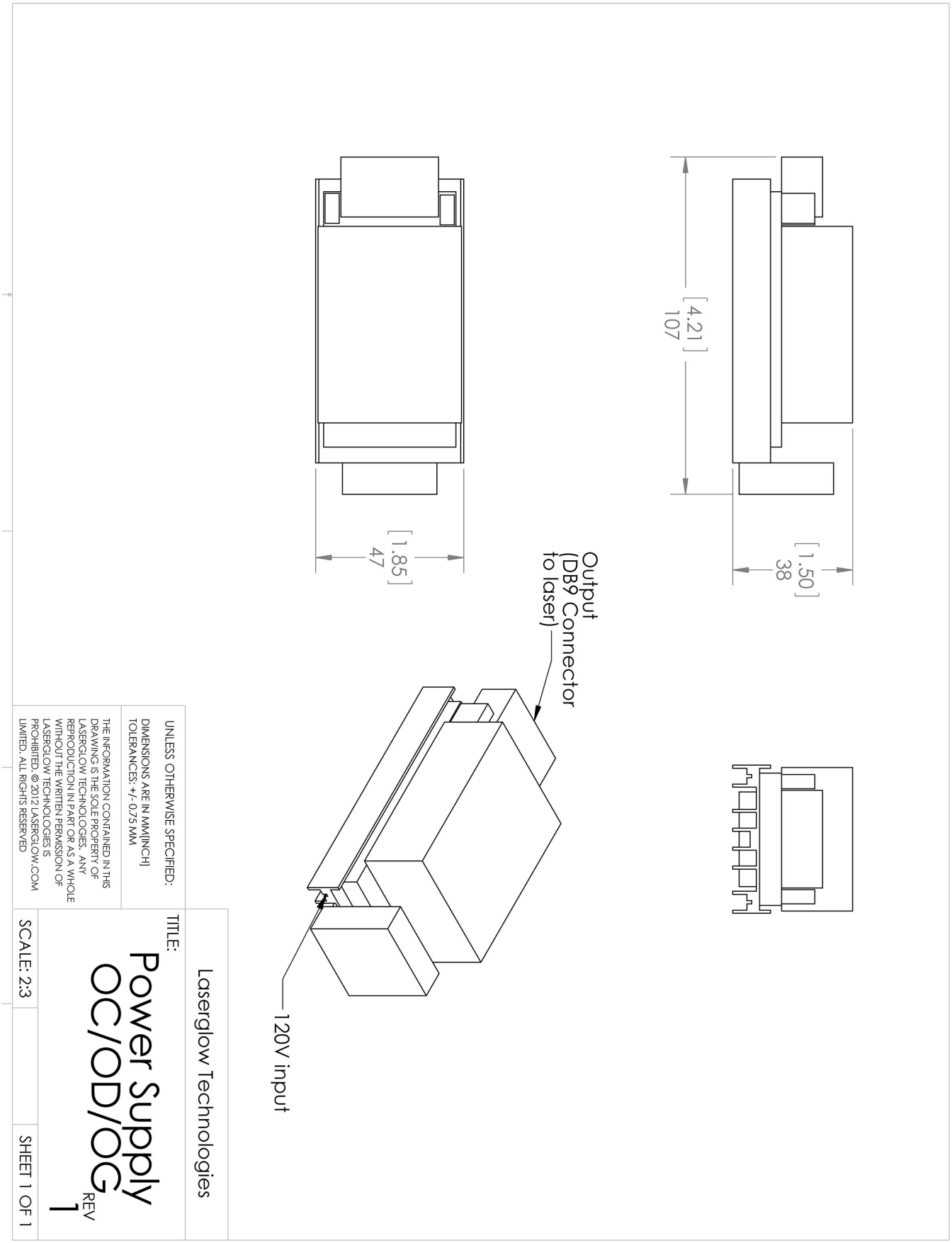
LAB/OEM "C" Housing

REV 1

SCALE: 2:3

SHEET 1 OF 1

Dimensional Drawing - Power Supply Form Factor: OC:



Accessories:

The most popular accessories for model C53050X9X are shown below. For additional details regarding these or other accessories please see our website or contact us directly.

Part Number	Description	
 AGF5327XX	LSG-532-NF-7 Fit-Over Safety Goggles 532nm Output: OD 7+ at 190-532 nm CE Certified Full Details: www.laserglow.com/AGF	
 TBK	Complete optics kits with breadboard mounting hardware. External modulators, variable attenuators, free-space fiber launch systems Full Details: www.laserglow.com/TBK	

FOR MORE INFORMATION PLEASE CONTACT:

LASERGLOW TECHNOLOGIES
99 Ingram Dr. Unit B, North York, ON, Canada M6M2L7
Tel. (416) 729-7976 Fax (716) 322-3510
sales@laserglow.com www.laserglow.com

E&OE: Data included in this sheet may be subject to change without notice.
Please confirm critical specifications with our staff prior to ordering.