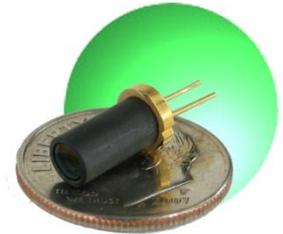




Advanced Photonic Sciences



MicroGreen™ laser displayed on a dime

MicroGreen™ Series

is a diode-pumped solid-state laser packaged in a 5.6 mm diameter TO-can—the world’s smallest microchip laser with 532 nm output. The MicroGreen is available in power ratings from 5 to 80 mW and in one special design that is certified for compliance with CDRH Class 3A requirements (<5 mW), all with near-diffraction limited output beam with less than 0.5% residual 1064 nm content.

Features:

- High electro-optic efficiency—enabling battery operation
- Smallest commercially-available green DPSS laser

Optical Specifications	MicroGreen 05/3A	MicroGreen 30	MicroGreen 50	MicroGreen 80
Output Power (mW)	1 - 5	> 30	> 50	> 80
Operating Mode	CW or QCW			
Output Center Wavelength (nm)	532			
Device-Temperature Range (°C)	Min.15 – 35. Typ. 5 -- 40	At one temperature ¹ within the range of 25 -- 35		
Polarization Ratio (typ.)	4:1			
Full Angle (1/e ²) Divergence (mrad, typ.)	7.5			
Ø Beam(1/e ²) at Output Window (µm, typ.)	110			
Mode Quality (M ² , typ.)	1.2		1.3	
Residual 1064nm Leakage (%)	< 0.5			
Noise (% RMS)	< 0.5			

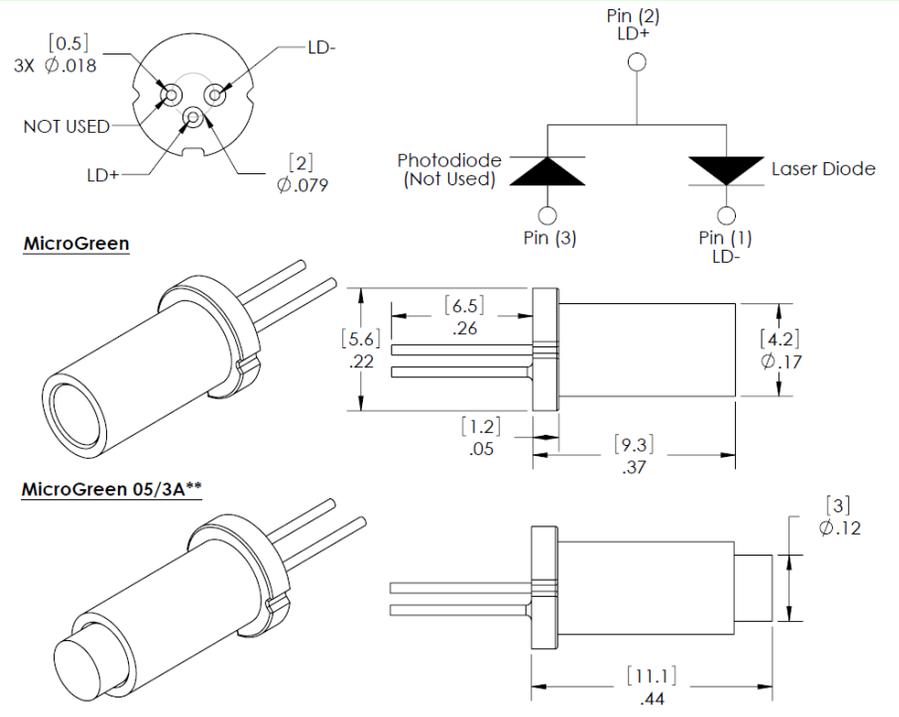
Electrical Input Requirements				
Voltage (V)	< 2.2			
Typ./Max. Drive Current (mA)	215 to 230	270/360	300/360	330/360
Max. Electrical Power (W)	< 0.5	< 0.8		

Other Specifications				
CDRH Class	IIIA	IIIB		
Storage Temperature (°C)	- 40 to +80			
Warranty (year)	1			

Specifications subject to change without notice. Other notes:

1. All specifications measured at factory-determined laser drive current and temperature settings, chosen within the 25° to 35° C range using a temperature-controlled heat sink. Higher temperature settings available with reduced output power specifications.

Mechanical Specifications



Notes

Advanced Photonic Sciences offers a limited warranty.

The MicroGreen™ Laser is an electronic device, and, as such, subject to damages due to electro-static discharge, overpowering, and transients.

Thermal management of the MicroGreen™ Laser must be included in the OEM design. Failures due to inadequate thermal management will void the warranty.

Please refer to Advanced Photonic Sciences' Warranty Statement / Return Policy for details. For assistance in any integration issues, please contact our experienced Applications Team at sales@advancedphotonicsciences.com

Class IIIA <5mW Class IIIB <500 mW



This product is sold as an OEM laser component and does not fully comply with 21 CFR 1020 and IEC 60825-1 : 1993 as applicable.

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