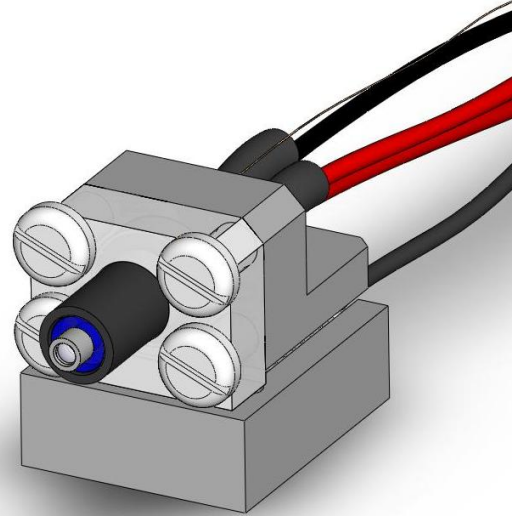


## Advanced Photonic Sciences

### TCA2 Temperature-Controlled Assembly

A diode-pumped solid-state laser sub-assembly with active temperature control



#### Features:

- Small-size laser sub-assembly with deterministic response in wide ambient temperature range.
- Improved boresighting with optional diverging lens
- Optional control board

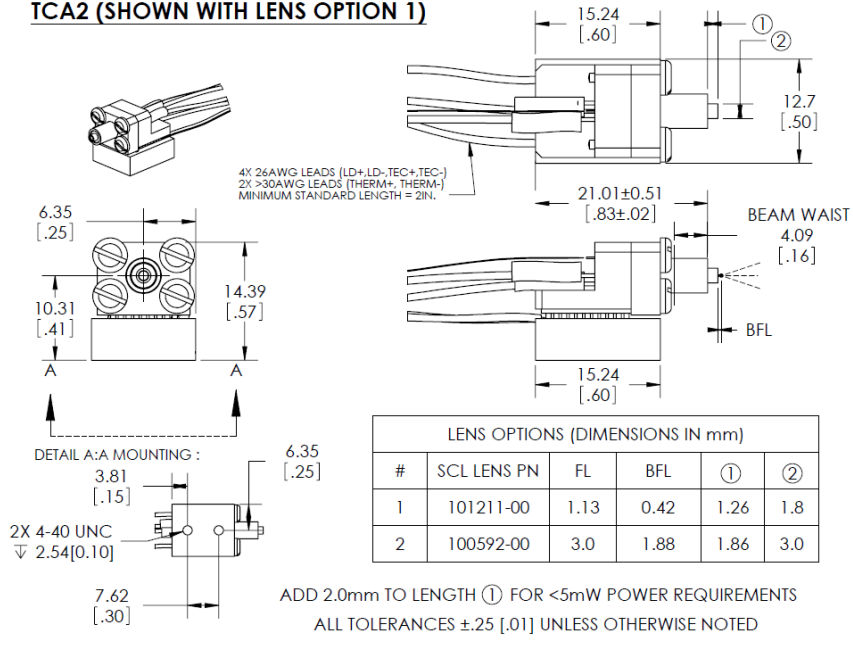
Optical Specifications <sup>1</sup>	MicroGreen TCA2 Series
Operating Mode	CW
Output Wavelength	(532.2 +/- 0.5) nm
Output Power <sup>2</sup>	(1 to 50) mW
Power Stability over 2 Hours	< ± 10 %
Ambient Temperature Range	(-20 to +50) °C
Beam Characteristics (typ.)	M <sup>2</sup> < 1.2, symmetric with divergence ~7 mrad
Residual 1064nm Leakage	< 0.5 %
Options <sup>4</sup>	Lens Control Board

Electrical Input Requirements <sup>5</sup>	
Laser Diode	< 350 mA, (1.8 to 2.2) V
TEC	< 2 A, < 5 V
Thermistor	10 kΩ, NTC

Other Specifications	
CDRH Classification <sup>3</sup>	Class IIIb
Storage Temperature	(- 40 to + 80) °C
Warm-up Time	< 2 minutes
Warranty <sup>6</sup>	1 year

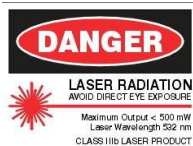
## Mechanical Specifications

### TCA2 (SHOWN WITH LENS OPTION 1)



## Notes

1. Specifications and information herein are subject to change without notice.
2. An APS Set Point (one temperature and drive current combination) is determined at factory.
3. All MicroGreen Series lasers are inherently CDRH Class IIIb lasers. Combined with certain external optics, SCL can determine an alternative APS Set Point corresponding to CDRH Class IIIa or Class II requirements.
4. Please inquire about custom specifications such as output power, control board, wire length, termination connector, or other custom requirements.
5. For assistance with integration issues, please contact our experienced applications team at [sales@advancedphotonicsciences.com](mailto:sales@advancedphotonicsciences.com).
6. APS offers a limited warranty. Please refer to its' Warranty Statement / Return Policy for details.



This product is sold as an OEM laser component and does not fully comply with 21 CFR 1040 and IEC 60825-1 : 1993 as applicable.

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