

795nm High Single Mode Power VCSEL in TO Can

(Part Number: VCSEL-795-1mW-SM-TO)

Applications:

1. Magnetometers;
2. Gyroscopes;
3. Quantum Sensing.

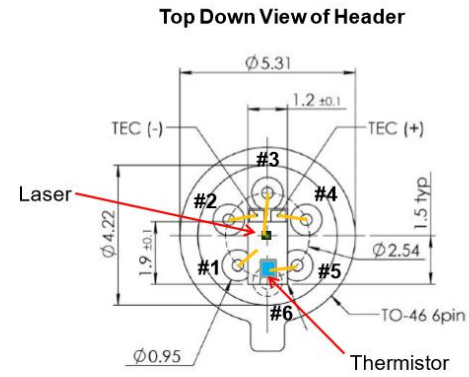
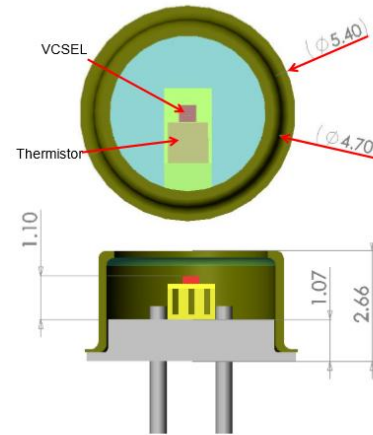
Features:

1. High single-transverse-mode power ($\geq 1\text{mW}$) under high temperature (up to 90°C);
2. Circular beam spot and low divergence angle;
3. Linear polarization with high polarization extinction ratio (up to 25dB);
4. Narrow linewidth (spectral width).

Specification:

ELECTRO-OPTICAL CHARACTERISTICS				
PARAMETER	MIN	TYP	MAX	TEST CONITIONS
Emission Wavelength (nm)		794.98		Vacuum
Chip Temperature (°C)	30		90	adjusted by TEC
Threshold Current (mA)	0.6	0.8	1.0	
Threshold Voltage (V)		1.8		
Output Power (mW)	1	1.2	1.5	@3mA
Operating Voltage (V)		2.3		
Differential Series Resistance (Ω)				
Wavelength Tuning Over Current (nm/mA)		0.3		
Wavelength Tuning Over Temperature (nm/°C)		0.06		
Operating Voltage (V)		2.5		
Side Mode Suppression (dB)		25	30	@3mA
Polarization Extinction Ratio (dB)		20	25	@3mA
Beam Divergence (°)	10		25	1/e ²
Spectral Bandwidth (MHz)		70		Unmodulated
Thermal Parameters				
Operating Temperature Range (°C)	-10		55	
Storage Temperature Range (°C)	-40		125	
Package				
Package Type	TO46			

Dimension:



Pin Number	Connection
1	Laser Cathode / Thermistor-B
2	TEC (-)
3	Laser Anode
4	TEC (+)
5	Thermistor - A
6	Case