795nm TO8 High Power Collimated VCSEL with TEC Laser



Description

LD-PD PTE LTD's PL-HPVCSEL-0795-1-A81-TO8C 795nm VCSEL is a vertical cavity emitting GaAsP/AlGaAs single mode diode laser with TO8 packaging. The module features high output, narrow linewidth, and good reliability,Collimated Output.

Features

- High Power
- Narrow linewidth
- Internal TEC and Thermistor
- Collimated beam output
- Field-proven high reliability
- RoHS compliant

E/O Characteristics

Parameter	Condition	Min.	Typ.	Max.	Units
Threshold current Ith	TLD=51℃		0.5	1	mA
Operating forward voltage Vop	Iop=2.5mA		2	2.2	V

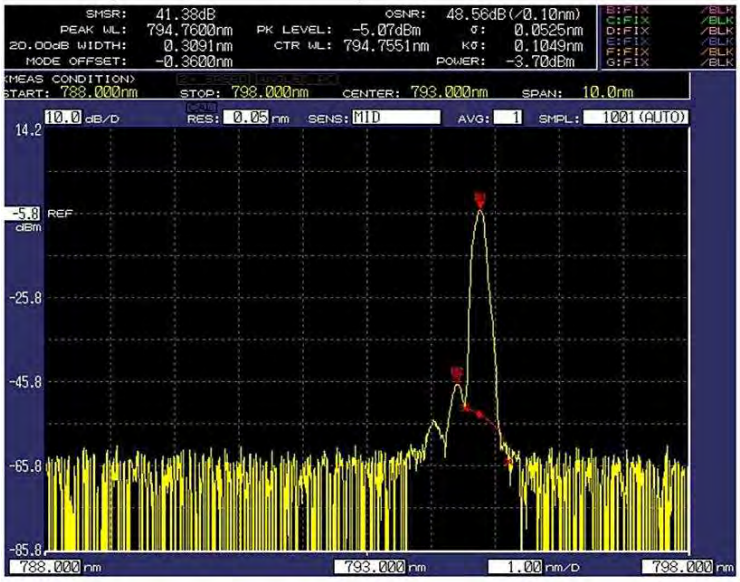
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Sales: contact@cybel-llc.com | Web: www.cybel-llc.com | Tel: +1 (610) 691-7012

Operating forward current Iop	TLD=51℃		2.5		mA
Center wavelength CW	TLD=51℃	794.5	795	795.5	nm
Output Power Pop	TLD=51℃ Iop=2.5mA	1.2			mW
linewidth	TLD=51℃			100	mHz
Current Tuning Coefficient	TLD=51℃		0.3		nm/mA
Temperature Tuning Coefficient	TLD=51℃		0.067		nm/° C
Side Mode Suppression Ratio SMSR		20			dB
Polarization Extinction Ratio PER		20			dB
Thermistor resistance B β			3930		k Ω
Beam Diameter（1/e2 ）	TLD=51℃		0.9		mm
Beam Divergence	TLD=51℃		1		mrad

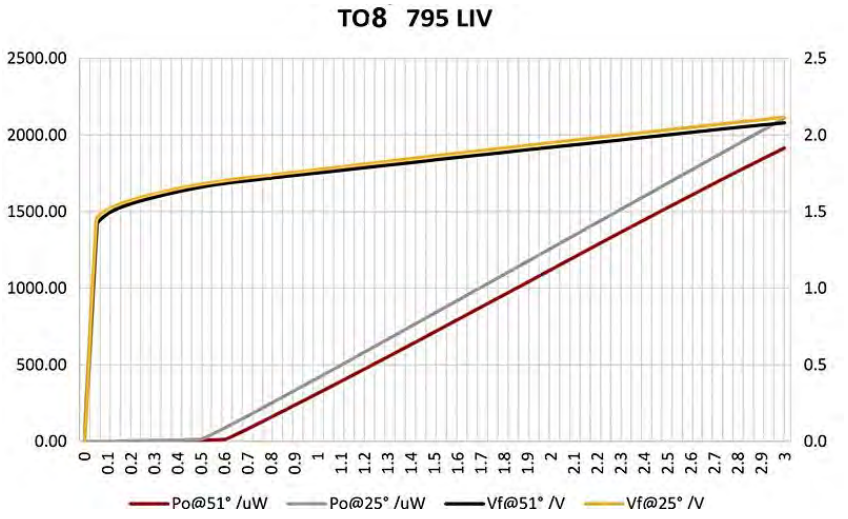
Absolute Maximum Ratings(T=51°C， IF=2.5mA)

Parameter	Symbol	Unit	Typical Value
LD Reverse Voltage	VR	V	5
LD Max CW Forward Current	IF	mA	3
Max TEC Current	IC	A	0.4
Operating case temperature	Top	°C	-40 - 80
Storage temperature	Tst	°C	-55 - 85
Welding Temperature		°C	≤260(10s)

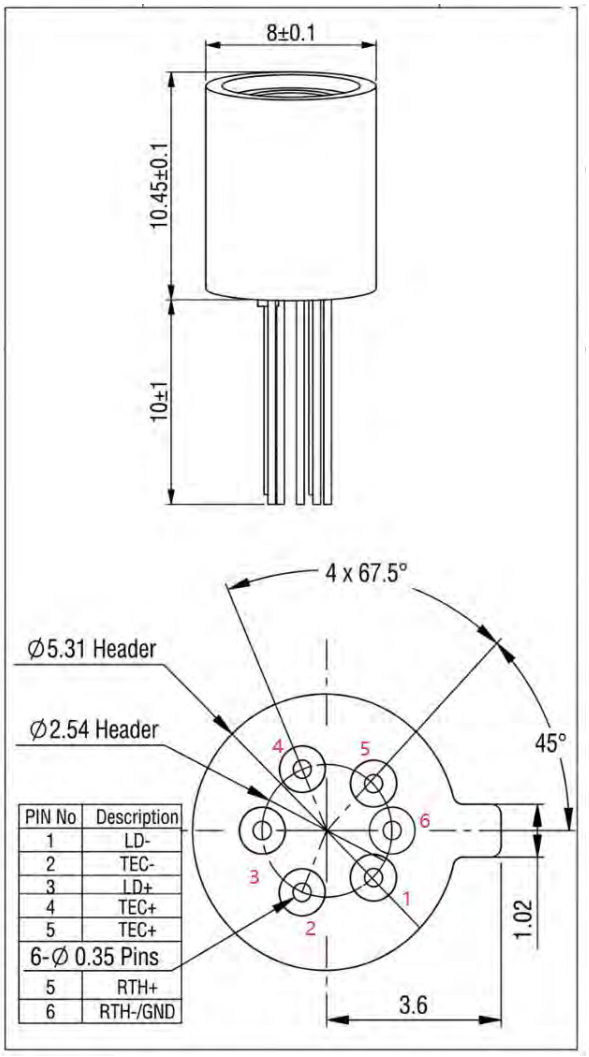
Spectrum (Iop=2.5mW, 51℃)



LIV Curves



Dimensions and Pin definitions



PIN No	Description
1	LD-
2	TEC-
3	LD+
4	TEC+
5	TEC+
6-Ø 0.35 Pins	
5	RTH+
6	RTH-/GND

Application

- Rb Atomic Clock
- Optic Coherent Experiments
- Magnetometer