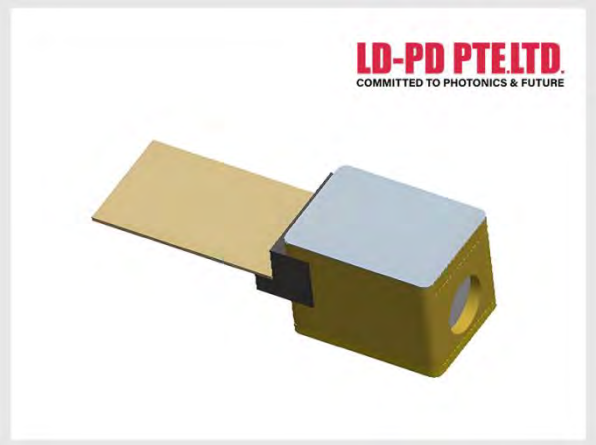
795nm BOX Vcsel Laser with TEC Non-magnetic



Description

PL-VCSEL-795-1-BOX is a vertical cavity emitting GaAsP/AlGaAs single mode diode laser with hermetic BOX packaging. The module features high output,narrow linewidth,good reliability and non-magnetic for sensitive environments.

Features

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

Laser Specifications

Opitical and Electrical Characterisitcs (T=51oC，IF=2.5mA)

Parameter	Condition	Min.	Typ.	Max.	Units
Threshold current Ith	T_{LD}=51°C		0.5	1	mA
Operating forward voltage Vop	I_{op}=2.5mA		2	2.5	V
Operating forward current Iop	T_{LD}=51°C		2.5		mA
Center wavelength CW	T_{LD}=51°C	794.5	795	795.5	nm

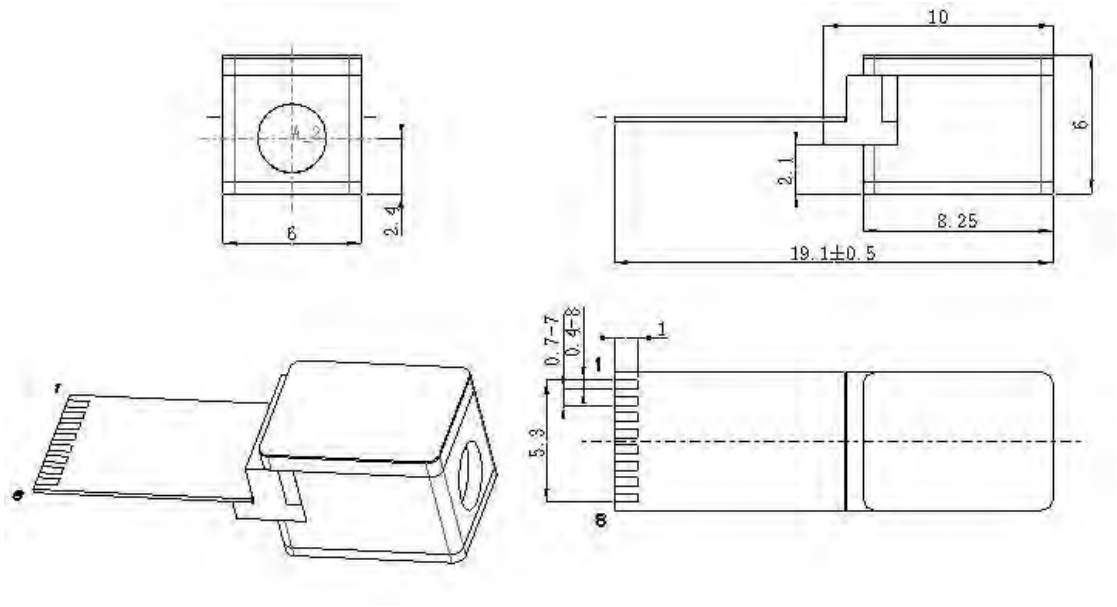
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Sales: contact@cybel-llc.com | Web: www.cybel-llc.com | Tel: +1 (610) 691-7012

Output Power Pop	T_{LD}=51°C I_{op}=2.5mA	1.2			mW
linewidth	T_{LD}=51°C	100			mHz
Current Tuning Coefficient	T_{LD}=51°C		0.3		nm/mA
Temperature Tuning Coefficient	T_{LD}=51°C		0.067		nm/°C
Side Mode Suppression Ratio SMSR		20			dB
Polarization Extinction Ratio PER		20			dB
Thermistor resistance B β			3930		kΩ
Beam Diameter（ $1/e^2$ ）	T_{LD}=51°C	1.3	1.5		mm
Beam Divergence（half-angle）	T_{LD}=51°C		1		mrad
Residual Magnetism	T_{LD}=51°C		1	2	nT

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

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

SPackage Shape Structure(Unit:mm)



PIN Speification

PIN	Description
1	GND
2	RTH
3	RTH
4	LD(-)
5	LD(+)
6	TEC(+)
7	TEC(-)
8	NC

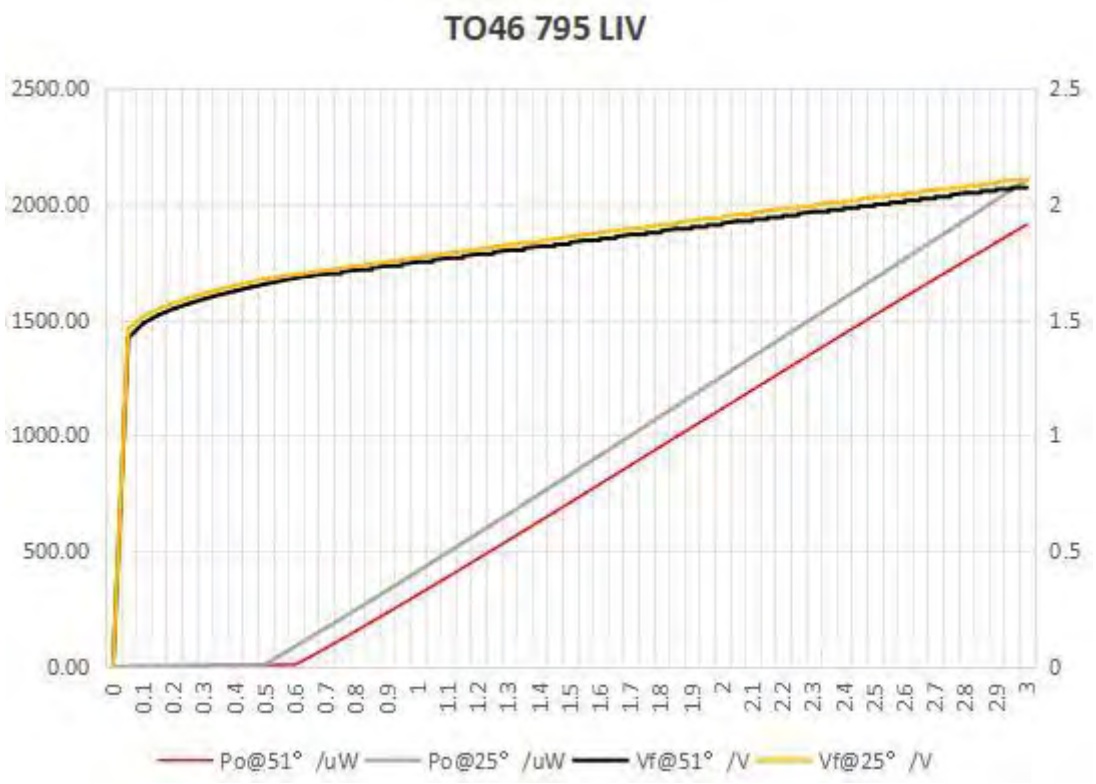
Safety Labels



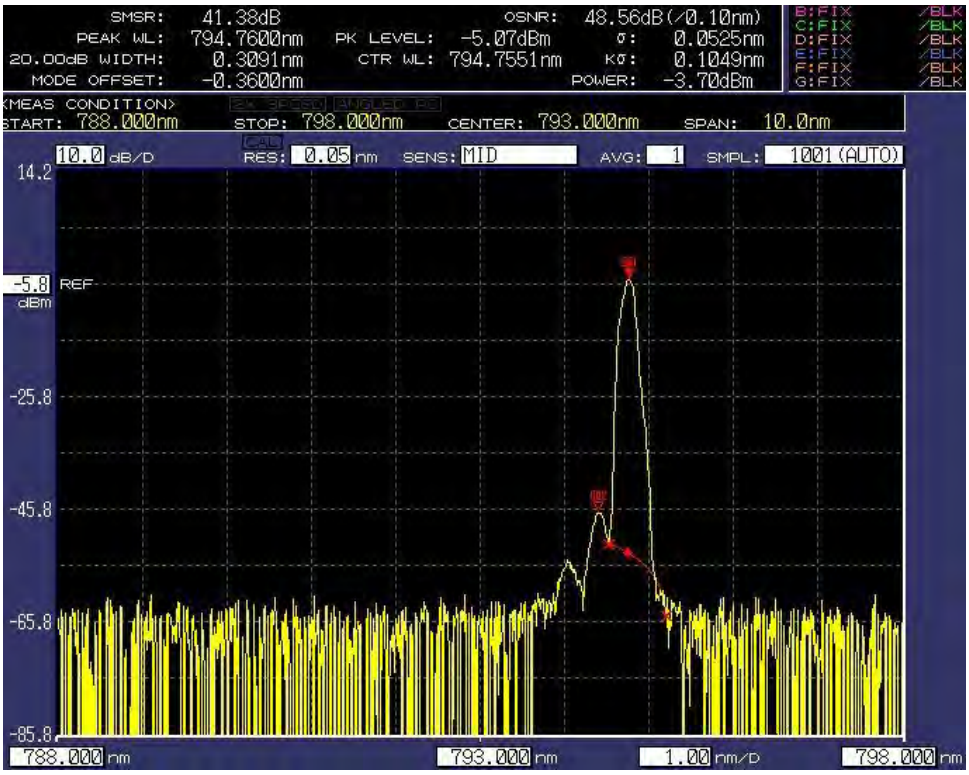
NOTES:

- INVISIBLE LASER RADIATION
- AVOID EYE OR SKIN EXPOSURE TO DIRECT OR SCATTERED RADIATION

Light-Current-Voltage Curves



Spectrum (Iop=2.5mW,51℃)



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Safety Labels



NOTES:

- INVISIBLE LASER RADIATION
- AVOID EYE OR SKIN EXPOSURE TO DIRECT OR SCATTERED RADIATION

Application

- Rb Atomic Clock
- Optic Coherent Experiments
- Magnetometer