

760nm SM VCSEL TO-CAN With Connector datasheet

P/N : WVOW-xT-0x

Description

The 760nm VCSEL is a vertical emitting MOVPE grown GaAsP/AlGaAs Single Mode diode laser. The chips are mounted in TO5 can. Wavelength tuning can be achieved via laser current and temperature. Tuning packaged with TEC and PD built in.



Features

- Narrow Linewidth;
- Internal TEC and Thermistor, ESD protection;
- 2 nm tunability with TEC;
- High performance and reliability

Applications

- O₂ Monitoring

Specification : Tsub = 20°C, CW bias unless stated otherwise

ELECTRO-OPTICAL CHARACTERISTICS					
PARAMETER	Symbol	MIN	TYP	MAX	Unit
Centre Wavelength	different wavelength selections are specified on the next page				nm
Side Mode Suppression	SMSR	25	--	--	dB
Threshold Current	Ith	--	0.5	--	mA
Threshold Voltage	Uth	--	1.8	--	V
Operating Current	Iop	--	--	2	mA
Output Power	Pout	0.08	--	--	mW
Wallplug efficiency	η_{wp}	--	12	--	%
Slope efficiency	η_s	--	0.3	--	W/A
Wavelength Tuning Over Temperature	/	--	0.06	--	nm/K
Wavelength Tuning Over Current	/	--	0.6	--	nm/mA
Forward Voltage	Vf	--	2	--	V
Spectral Bandwidth	/	--	100	--	MHz
Thermistor Resistance	Rt	9.5	10	10.5	k Ω
TEC Current	Itec	-150 for heating		+300 for cooling	mA
Fiber Specification	/	HP780			
Fiber Length	L	0.5	--	1.2	m
Connector		FC/APC			

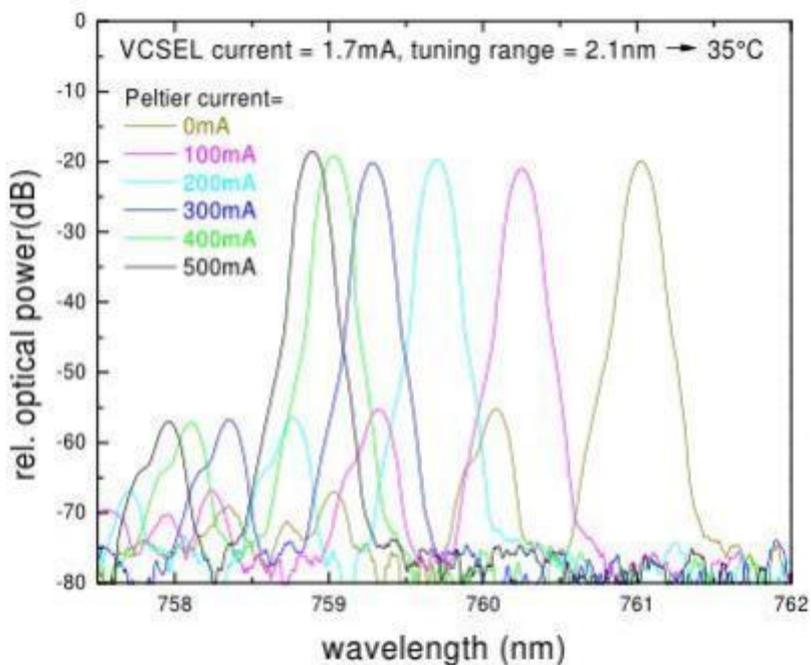
Environment Specification

Item	Min	Typ	Max	Unit
Operating Temperature	-40	--	80	°C
Storage Temperature	-40	--	100	°C

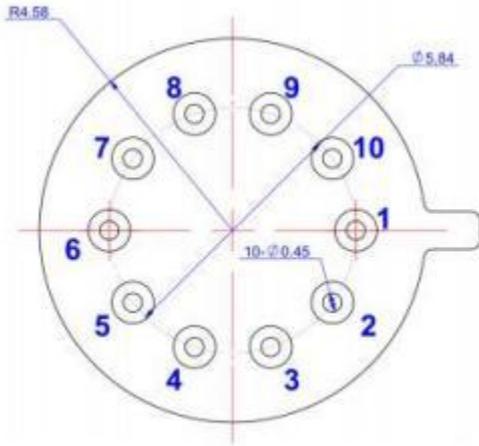
Wavelength Selection Criteria

Emission wavelength λ_R	@T = 20°C, I _{tec} = 0, P _{out} = 0.3mW		
760nm range	Min	Max	Unit
±1nm	759.0	761.0	nm
±3nm	757.0	763.0	nm
763nm range	Min	Max	Unit
±1nm	762.0	764.0	nm
±3nm	760.0	766.0	nm

Spectral Characteristics

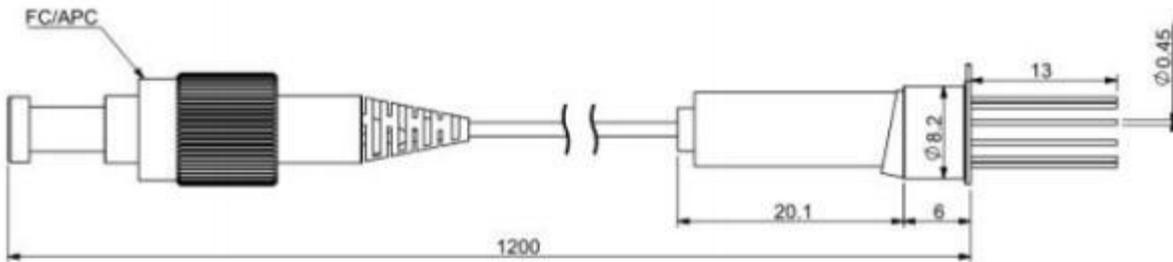


Pin Description:



Pin	Description
1	TEC+
3	Laser Cathode(-)
4	Laser Anode(+)
7	case
8	Thermistor
9	Thermistor
10	TEC-

Mechanical Dimension :



Ordering Informations

760nm range	PN
±1nm	WVOW-0T-01
±3nm	WVOW-0T-03
763nm range	PN
±1nm	WVOW-3T-01
±3nm	WVOW-3T-03