

# BW10-1550-T-T7



**BANDWIDTH10, LTD.**

**Description:**

Bandwidth10's BW10-1550-T-T is part of a family of lasers based on the innovative High Contrast Grating (HCG) single mode 1550 nm VCSEL.

**Applications:**

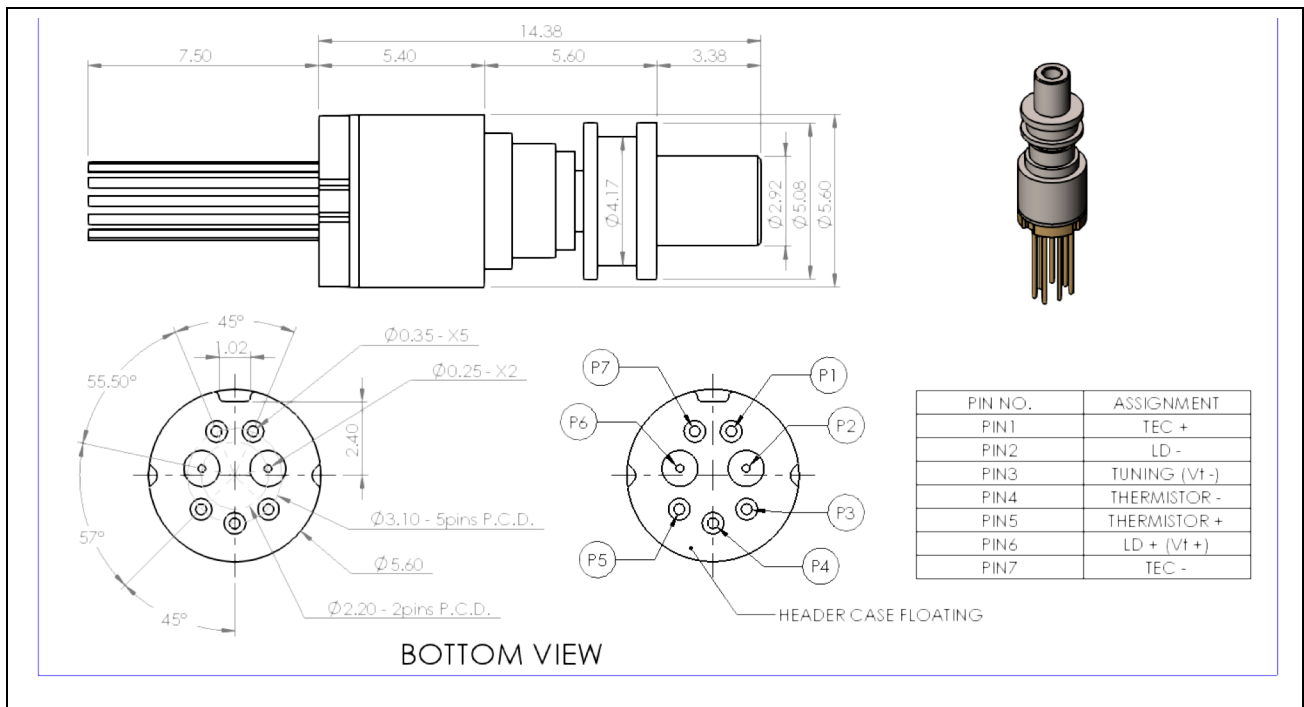
- Optical communications
- Swept source
- Optical gas sensing
- LIDAR
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- Integral TEC (Temperature Stabilization)
- CW Optical Output Power: Typical 1mW (@20°C TEC Temperature)
- Single Mode VCSEL (~1550nm)
- Wide Tuning Range: >10nm
- High Modulation Bandwidth (10 GHz)
- Fast Wavelength Tuning (~100 kHz)
- Power Dissipation: < 40mW

**Features:**

- TO-56 7Pin Small Form Footprint
- LC Fiber Connector, (1.25mm Fiber)

## Dimensional Drawing and Pin Assignment



**CAUTION:** Device is sensitive to electrostatic discharge.

**General Operating Table**

Parameter	Symbol	Values			Unit
		Min	Typical	Max	
Optical Output Power	P	-6 @20° C	-2 @20° C	1 @20° C	dBm
Operating Current	$I_{LD}$	0	18	25	mA
Operating Temperature	$T_{op}$	0	20	50	°C
Center Wavelength	$\lambda$		1550		nm
Threshold Current	$I_{th}$		10		mA
Laser Drive Voltage	V <sub>cc</sub>	0	1.7	2.5	V
Differential Resistance	R <sub>d</sub>		50		$\Omega$
Tuning Range (> 250 $\mu$ W)	$\Delta\lambda$	-	8	-	nm
Max. Mechanical Tuning Response	f <sub>max</sub>	100	200	-	kHz
Tuning Voltage	V <sub>tune</sub>	0	Test Sheet	Test Sheet	V
Tuning Current	I <sub>tune</sub>	0	-	100	$\mu$ A

**Order and Contact Information**

Module Number	Contact Information	Unit
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