BW10-907B-TR-PW-SR-KC-KCD-OP

BANDWIDTH10, LTD.

Description:

Bandwidth10's, BW10-907B swept source is based on our patented wavelength tunable vertical cavity surface-emitting lasers (VCSEL) with innovative High Contrast Grating (HCG). The swept source consists of a single mode tunable 1060 nm VCSEL and a Semiconductor Optical Amplifier (SOA), driving electronics, A-Scan trigger and a K-Clock module.

Fiber pigtail with FC/APC connector

FC/APC receptacle

Applications:

- Optical Coherence Tomography (OCT)
- Optical Sensing

Features:

- Laser Class 3B
- M4 mounting holes
- Size 150 mm x 106 mm x 36 mm
- Wavelength sweep range: up to 50°nm.
- FC/APC receptacle or 0.4m Hi1060 fiber pigtail with FC/APC connector. Polarization maintaining fiber PANDA980 with FC/APC aligned to the slow axis available on request.
- Integrated K-Clock
- Linearized uni-directional wavelength sweep at 30 kHz

  – or-

  Non-linear bi-directional sweep rates, 30 KHz, 50 KHz, 100 KHz or 200 KHz. Other rates available upon request.
- GUI and command line interface support through USB-C port

Absolute Maximum Ratings

Parameter	Symbol	Min	Unit
Storage Temperature	Tstg	-20 to +70	°C
Operating Case Temperature	Tc	+10 to +45	°C

Optical specification

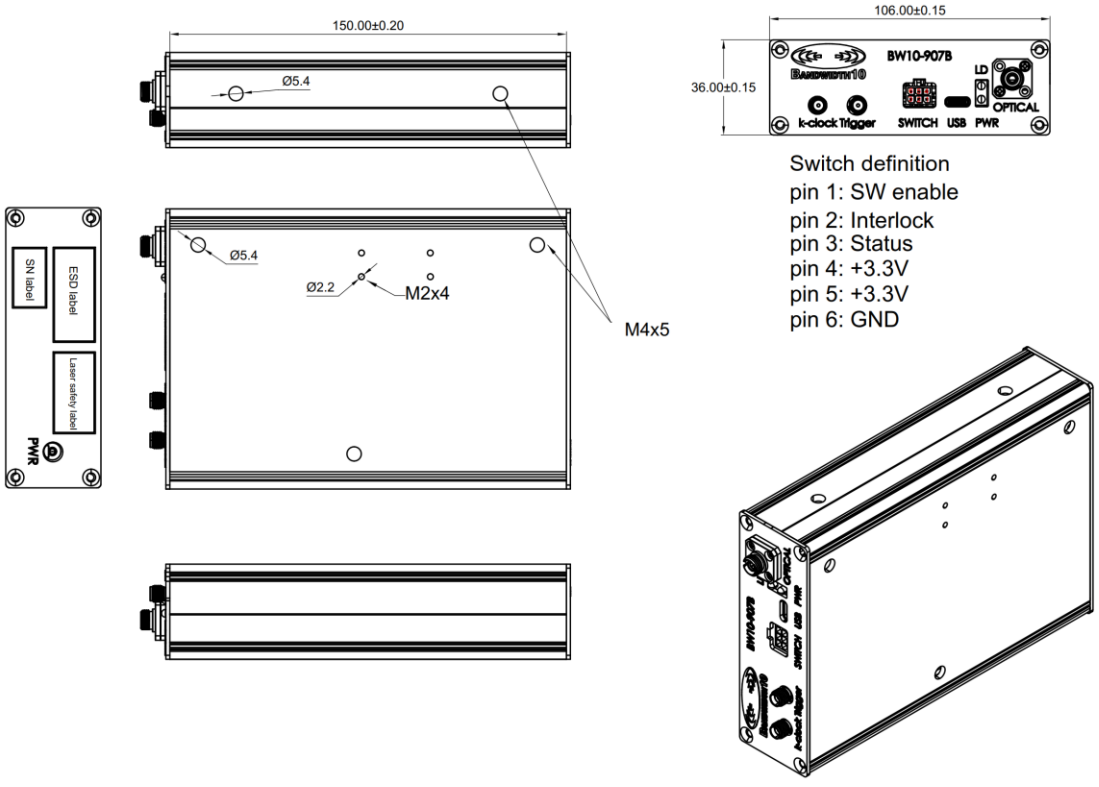
Parameter	Values			Unit
	Min	Typical	Max	
Start wavelength (reddest guaranteed wavelength) *customized units with start wavelength around 1045 nm are available on request		1075		nm
Wavelength tuning range (tuning to blue wavelengths) **Determined by TR value in model number	30			nm
	40			nm
	50			nm
Output power over tuning range **Determined by PW value in model number	20			mW
Spectral Flatness (max/min power over tuning range)			10	dB
Linear Uni-directional sweep rate **Determined by SR value in model number, other rates available on request		30		kHz
Duty Cycle ***For uni-direction sweep	40	50	60	%
Non-linear bi-directional sweep rate **Determined by SR value in model number, other rates available on request		30		kHz
		50		kHz
		100		kHz
		200		kHz
Duty Cycle ***For non-linear bi-directional direction sweep	70			%
MZI free spectral range of K-Clock **Determined by KC value, other FSR available on request		30		GHz
Fiber delay in front of K-clock **Determined by KCD value, other delays available on request with larger housing see BW10-907A datasheet		3		m

**= Refer to Order Information table

Electrical Specification

Parameter	Symbol	Values			Unit
		Min	Typical	Max	
Required Power supply voltage Please use the power adaptor accompanied with the shipment.		9	12	15	V_{DC}
Required Power supply current		1.0			A
Analog K-Clock output Voltage SMA		t.b.d.		t.b.d.	V
Analog A-Scan trigger Voltage output SMA @50Ω		t.b.d.		t.b.d	V

Mechanical Drawing (in mm)



Contact Information

Contact Information
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Order Information

Model Number			
BW10-907B-TR-PW-SR-KC-KCD-OP Please specify the parameters			
Parameter	**Description**	**Value**	**Explanation**
TR	Tuning range	30	30 nm tuning range
		40	40 nm tuning range
		50	50 nm tuning range
PW	Guaranteed output power	20	Min 20 mW over tuning range
SR	Sweep rate	30L	30 KHz Linear Uni-directional sweep rate
		30	30 KHz Non-linear bidirectional sweep rate
		50	50 KHz Non-linear bidirectional sweep rate
		100	100 KHz Non-linear bidirectional sweep rate
		200	200 KHz Non-linear bidirectional sweep rate
KC	K-Clock option	00	No integrated K-clock
		30	K-Clock MZI with 30GHz FSR
KCD	Fiber delay in front of K-clock	00	No delay / No integrated K-clock
		03	3 m of fiber delay in front of K-clock
OP	Optical Port	RH	Hi1060 fiber with FC/APC receptacle
		PH	0.4m Hi1060 fiber pigtail with FC/APC connector
		R9	PANDA980 polarization maintaining fiber with FC/APC receptacle
		P9	0.4m PANDA980 polarization maintaining fiber pigtail with FC/APC connector