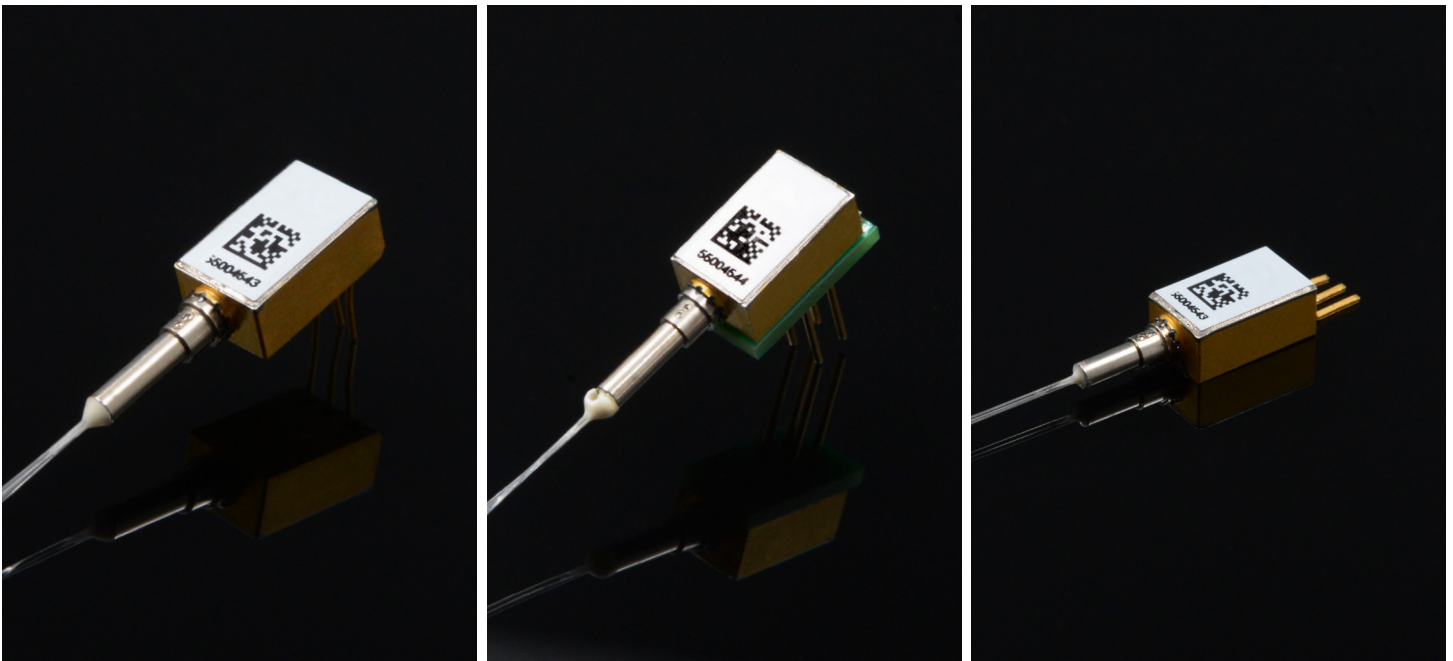


# ULTRA MINI MTOF

## Wideband Tunable Optical Filter

The MTOF series are tunable optical filters that can be used in various applications to improve the reach of optical transmission systems or signal monitoring applications. Ultra mini MTOF is ideal for filtering out amplified spontaneous emission (ASE) noise in post-amplified transmitters or pre-amplified receivers. With uniquely compact and very low cost, ultra mini MTOF is also ideal for integration in small transceiver form-factors for 400 Gb/s and above applications.



### FEATURES

- C-band or L-band
- 5 THz tuning range
- 180 GHz or 305 GHz @ 3 dB Bandwidth for stander version, customized is available
- 3.0 dB insertion loss
- Low power consumption
- Compact size

### APPLICATIONS

- ASE suppression
- Rx/Tx channel filter
- Coherent signal isolation
- Colorless Rx dynamic range extension

**Product Specification**

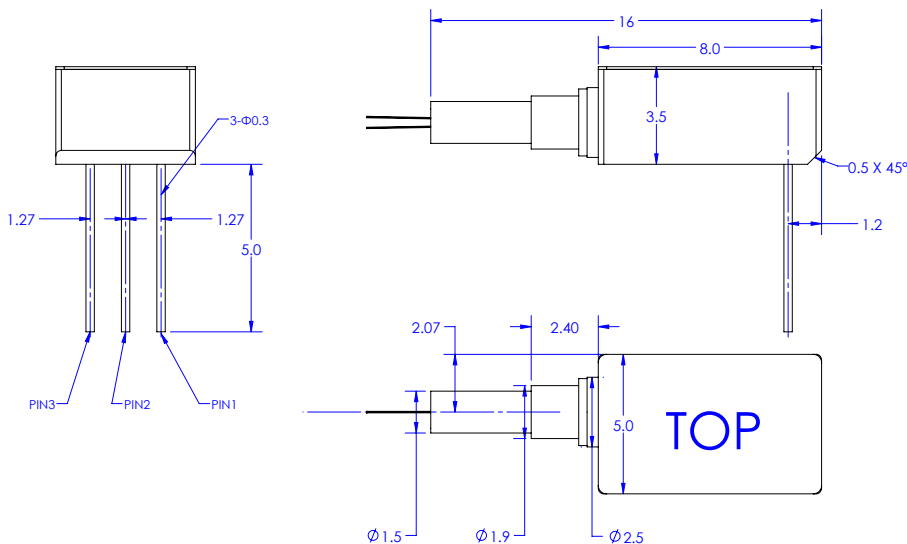
Parameter	Condition	Min	Typ	Max	Units
Frequency Tuning Range	For C-band type	196.25		191.1	THz
	For L-band type	191.1		186	
3 dB Bandwidth <sup>1</sup>	For 180GHz version		180		GHz
	For 305GHz version		305		
Side-mode Suppression Ratio		20			dB
TF Out-Of-Band Rejection		25	30		dB
Insertion Loss			2.0	3.0	dB
PDL	In ±12.5 GHz of center wavelength		0.2	0.4	dB
Return Loss		27			dB
Tuning Time	Any to any channel		30	50	ms
Voltage Range				12	V
Absolute Maximum Ratings				12.5	V
Optical Power				27	dBm
Electrical power				20	μW
Fiber Type		Corning ClearCurve ZBL fiber			
Fiber Length <sup>1</sup>			1.0		M
Operating temperature		-5		75	°C
Storage temperature		-40		85	°C
Dimensions [ref.]	L×W×H	8×5×3.5			mm

<sup>1</sup> Customized as requirement.

**Product Dimensions**

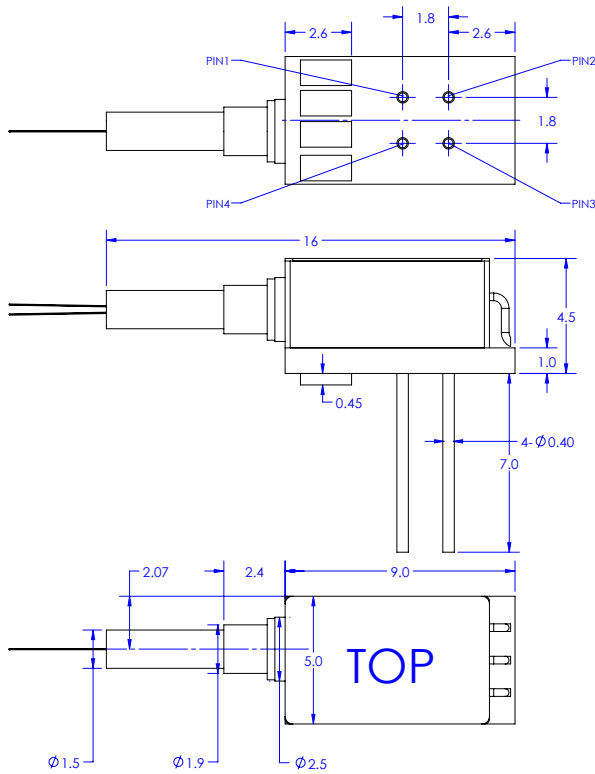
Dimensions in millimeters.

3.5 mm mini MTOF-SIP package



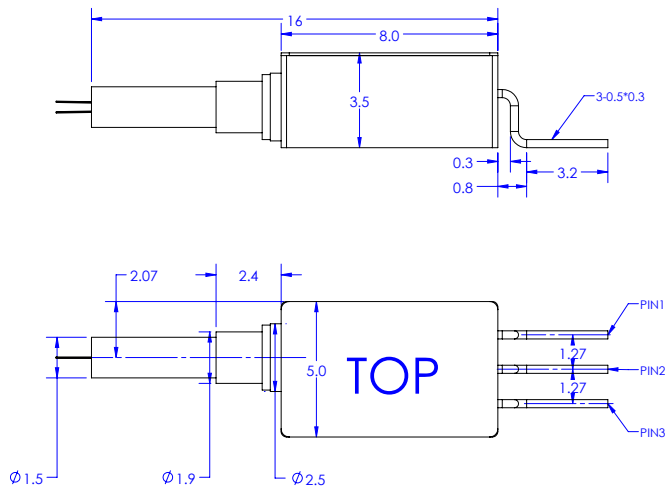
PIN 1	Short Wavelength
PIN 2	GND
PIN 3	Long Wavelength

## 3.5 mm mini MTOF-SMT package with adapter



PIN 1	GND
PIN 2	Long Wavelength
PIN 3	NC
PIN 4	Short Wavelength

## 3.5 mm mini MTOF-SMT package



PIN 1	Short Wavelength
PIN 2	GND
PIN 3	Long Wavelength

**Ordering Information**

MTOF - X - XXX - XXX - XXXX  
 A B C D

A	Wavelength Range	C = C-Band L = L-Band
B	FWHM	Customizable Typical: 145,180,300
C	Package	SIP SMT DIP
D	Fiber	CORN1 = ZBL OFS01 = OFS_81161