# MANUALLY TUNABLE BANDPASS FILTER

DiCon's Manually Tunable Bandpass Filter is used to manually adjust the center wavelength of a narrow passband in either the C Band or the L Band. Manually Tunable Bandpass Filters use a hard-coated thin film interference filter which is mounted between two angled fiber collimators. Wavelength selection is made by adjusting the filter angle using a high precision micrometer handle with 0.05 nm tuning resolution.



## FEATURES

- Manual tuning
- C Band and L Band options available
- Flat Topped Passband
- Excellent tuning resolution (0.05 nm)

## **APPLICATIONS**

- Tuning the center wavelength of a broadband source
- Laboratory test and measurement systems
- Noise suppression
- Wavelength selection



Specifications subject to change. Copyright © 2020 DiCon Fiberoptics, Inc. All rights reserved.

# MANUALLY TUNABLE BANDPASS FILTER

### **OPTICAL SPECIFICATIONS<sup>1</sup>**

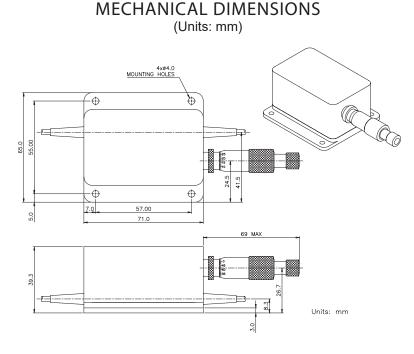
PARAMETER		RATING
Tuning Range	C Band	1535 to 1565 nm
	L Band	1565 to 1595 nm
Min IL @ Peak <sup>2</sup>		1.5 dB max.
Tuning Resolution		0.05 nm typ.
PDL	C Band	0.15 dB typ. <sup>3</sup>
	L Band	0.15 dB typ.4
Back Reflection		-45 dB max
Optical Power⁵		500 mW max
Operating Temperature		-5 to 70 °C
Storage Temperature		-40 to 85 °C
Fiber Type		$9/125 \ \mu m$ single mode

1. All specifications are without connectors

2. IL measured at center wavelength @ 25°C

- 3. Typical PDL is 0.15 dB @ 1550 nm; 0.05 dB @ 1565 nm; 0.3 dB @ 1535 nm
- 4. Typical PDL is 0.05 dB @ 1580 nm; 0.05 dB @ 1595 nm; 0.15dB @ 1565 nm

5. High power version (1.5 W) available as a special request



#### ORDERING INFORMATION тғ - 🖸 - 📮 - 📮 - 📮 **Tuning Range** 1550 1535 - 1565 nm 1580 1565 - 1595 nm 0.5 dB Bandwidth 0.8 0.8 nm 3.2 3.2 nm<sup>1</sup> Fiber and Fiber Jacket Type<sup>2</sup> 9/TB SMF-28 With 900 um Tight Buffer 9/9LT SMF-28 With 900 um Loose Tube 9/2LT SMF-28 With 2 mm Loose Tube 9/3LT SMF-28 With 3 mm Loose Tube **Connector Type** FC FC/SPC FC/APC FC/APC NONE Ν Also Available: SC. SC/UPC. SC/APC. ST. ST/UPC. LC

#### Pigtail Length

•	•
1	1 Meter

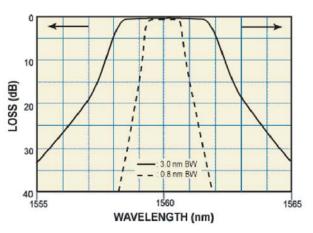
X Specify X Meters

1. Only available for the C band (1550 nm) option

2. Or other equivalent 9 um singlemode fiber

2. Or other equivalent e un enigrenieue neer

### **OPTICAL SPECTRUM**



NOTE: Optical Spectrum example above is for the C Band option \*The L Band option has a similar 0.8 nm BW shape

0124<u>C</u>

MANUALLY TUNABLE FILTER