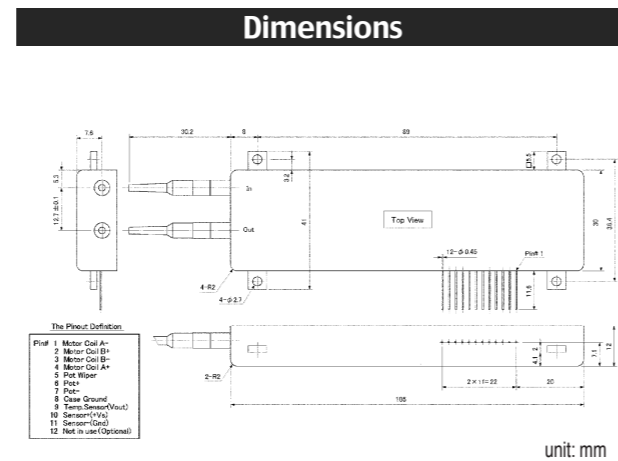


MOTORIZED OPTICAL TUNABLE FILTER
OTF-655



The OTF-655 is a compact, tunable filter module that incorporates a stepper motor for accurate wavelength selection. The device utilizes Santec's unique polarisation independent, linear sliding technology to achieve accurate wavelength tuning whilst maintaining constant optical properties over the entire wavelength range. The device is hermetically sealed with an effective height of only 7.1mm. It is suitable for PCB mounting and system integration.

Model Variations

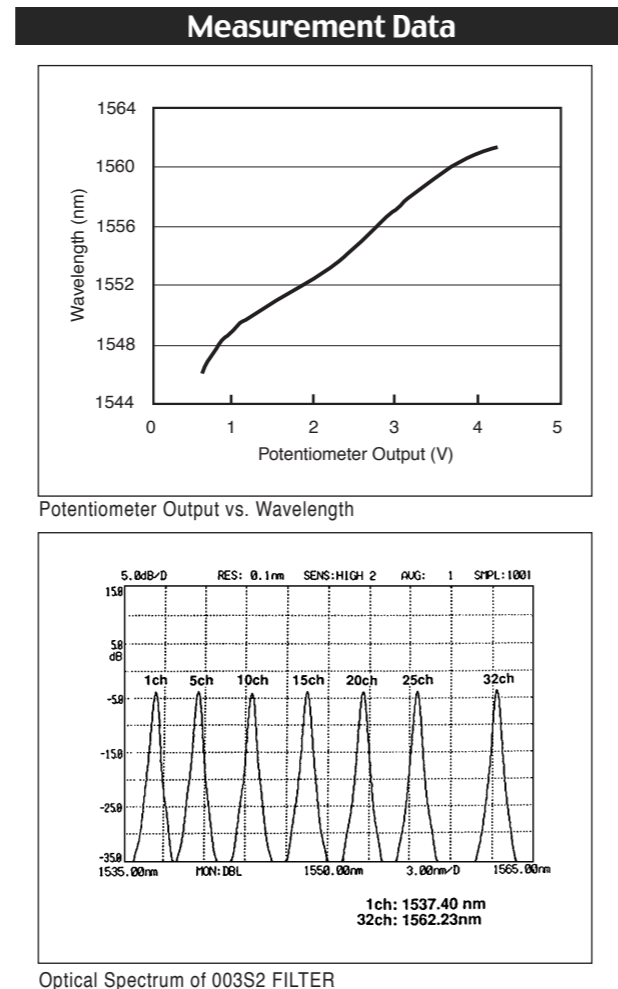
The OTF-655 is available with a wide range of filters, each tailored to a specific application. For example, for DWDM channel selection a double stage filter can be used to provide high adjacent channel isolation. In systems with a 100GHz channel spacing, an isolation of greater than 25dB can easily be achieved. Filters can also be provided for most wavelength ranges, including any 35nm in the 1520-1620nm range.

Features

- ▶ Constant optical properties over entire tuning range
- ▶ Excellent long term stability and reliability
- ▶ Latchable operation
- ▶ Compatible with TTL control circuit
- ▶ Suitable for mass production and system integration

Applications

- ▶ DWDM channel selection
- ▶ ASE noise reduction
- ▶ Wavelength monitor
- ▶ Optical information, sensing, measurement systems



Optical Specifications

Parameter	Unit	003S2 FILTER	Notes
Tuning Range	Min. nm	35	
Resolution	Max. nm	0.035	
Return Loss	Min. dB	45	
Polarization Dependent Loss (PDL)	Max. dB	0.2□	
Polarization Mode Dispersion (PMD)	Max. psec	0.10□	
Maximum Input Power	dBm	+20□	
Operating Temperature	°C	0 to +70	< 90% humidity

Electrical and Mechanical Specification

Parameter	Unit	Notes
Electrical Power Consumption	Max. W	2.5
Electrical Power to Hold	Max. mW	10
Position Sensor	-	Included
Size	mm	30 x 105 x 12

Filter Selection

Parameter	Unit	Filter Type		
		003S1	003S2	008S2
Max. Insertion Loss	dB	4.5	7.0	5.0
-3dB Bandwidth	nm	0.3 - 0.65	0.2 - 0.45□	0.8 - 1.2□
-20dB Bandwidth	Max. nm	5.0	1.2	5.0

Ordering Code

