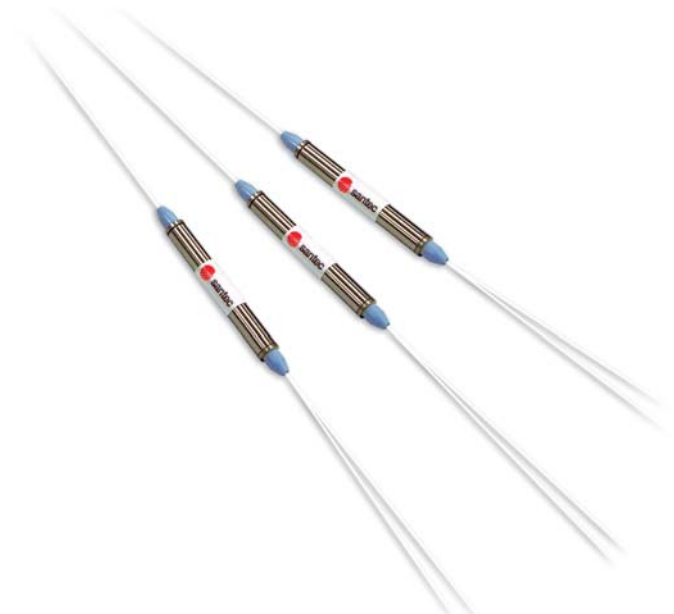


# Triple Play Filter for FTTx TPF-15

Passive Optical Network (PON) technology is rapidly emerging to become the solution of choice for access networks such as fiber to the home (FTTH). It can deliver converged data, video and voice transmission from a central office to the customer premises. Santec's TPF-15 Triple Play Filter is designed to be used to upgrade two wavelength 1310 / 1490nm PON networks with an additional 1550nm channel to enable full "triple play" connectivity. The filter can be installed in either the central office OLT or the ONU at the customer's premises. Both standard and high isolation versions are available.



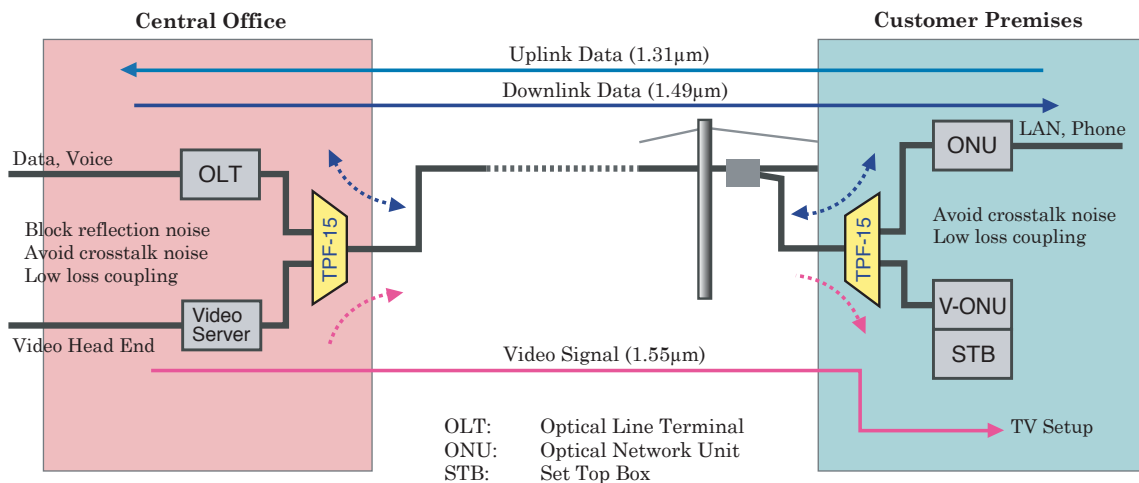
## Features

- ▶ Low insertion loss
- ▶ High transmission isolation
- ▶ High reflection isolation
- ▶ Excellent temperature stability
- ▶ Excellent environmental durability
- ▶ Telcordia GR-1221 qualified
- ▶ RoHS compliant

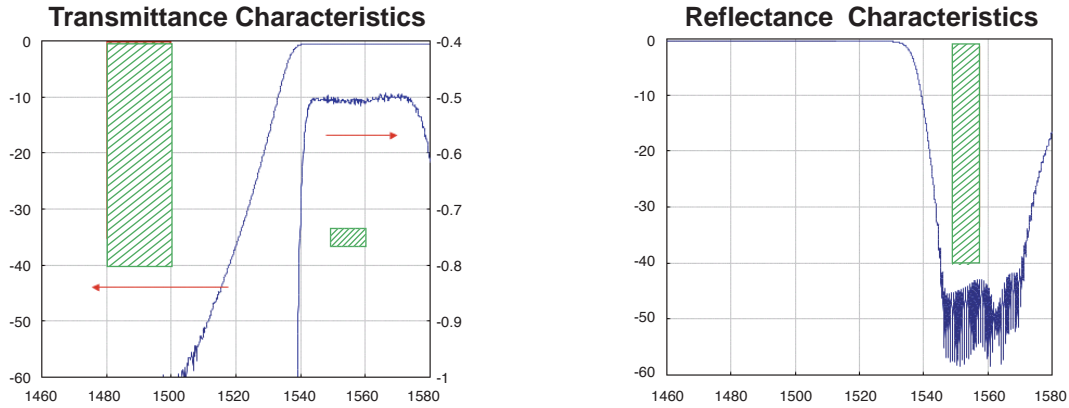
## Applications

- ▶ B-PON / G-PON / GE-PON
- ▶ FTTH / FTTP / FTTC

## Passive Optical Network



Typical Spectra



Specifications \*1

No.	Parameter	Min	Max	Unit	Notes	
1	Transmission Band	1550	1560	nm		
2	Insertion Loss *2	Standard	-	1.0	dB	In transmission band
3	Ripple					
4	Isolation	40	-	dB	Wrt. reflection bands 1 & 2	
5	Reflection Band 1	1260	1360	nm		
6	Reflection Band 2	1480	1500	nm		
7	Insertion Loss	-	0.5	dB	In reflection band 1, 2	
8	Ripple	-	0.2	dB	In reflection band 1, 2	
9	Isolation	Standard	25	-	dB	Wrt. transmission bands
		High	40			
10	PDL	-	0.10	db	In transmission band	
11	Directivity	-	45	dB		
12	Operating Temperature *3	-20	70	°C	Non-condensing	
13	Storage Temperature	-40	85	°C	Non-condensing	
14	Fiber Length	1.05 ± 0.05		m		
15	Fiber Type	900µm SMF-28		-		
16	Package Dimensions	φ 5.5 x L39		mm		

\*1 All parameters are specified over operating temperature range.  
 \*2 Insertion loss includes Ripple and PDL, without connectors.  
 \*3 -40 to 85°C is also available.

Ordering Code

TPF-15-1-B-10-D/1550

B: Isolation and Crosstalk : **S**: Standard **H**: High Isolation  
 D: Connector Type : **00**: None **FS**: FC-SPC **FA**: FC-APC **SS**: SC-SPC  
**SA**: SC-APC **LC**: LC-SPC **MU**: MU-SPC **MJ**: MUJ-SPC

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