

Optical Passives (ISP)

OP35F1x-CF

Red/Blue, CWDM/DWDM, and DWDM
Channel Group Combiner/Separator Filters

FEATURES

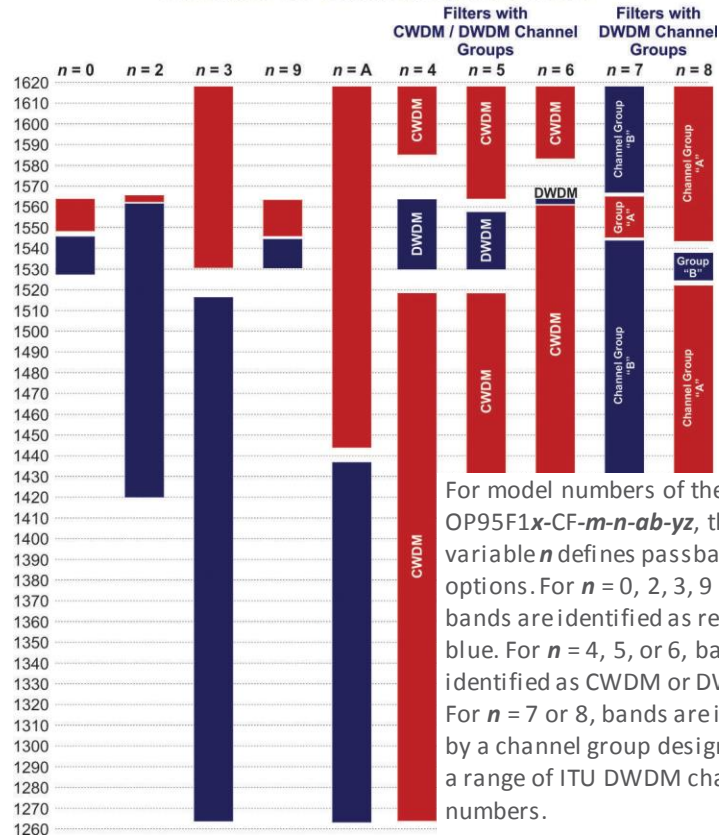
- 3-port filters to combine or separate red and blue (or CWDM and DWDM) bands
- Low insertion loss
- SC/APC connectors ensure performance repeatability, compatibility and easy installation and maintenance
- Removable adapters for easy cleaning
- Options for standard or high isolation
- Optional line monitoring tap
- Occupies one half-depth slot



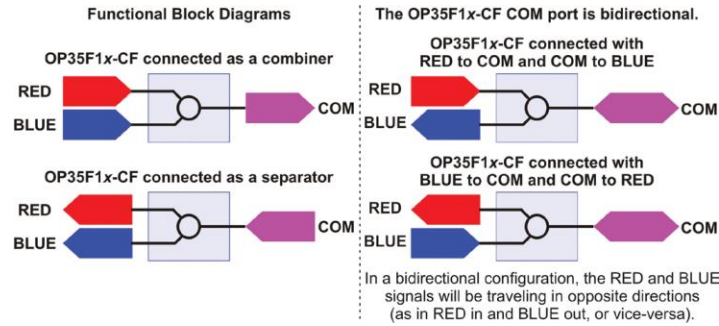
PRODUCT OVERVIEW

ARRIS OP35F1x-CF series of combiner/separator filters are 3-port filters that combine (or separate) red and blue (or CWDM and DWDM) bands. The various available band combinations are shown graphically on the following page. In addition to packages containing a single filter, dual-filter packages are also available, and both single- and dual-packaged filter modules are also available with an optional -20 dB tap for monitoring. These filters are designed to be used in controlled indoor environments within a temperature range of -20° to +65°C.

Passbands for Combiner/Separator Filters



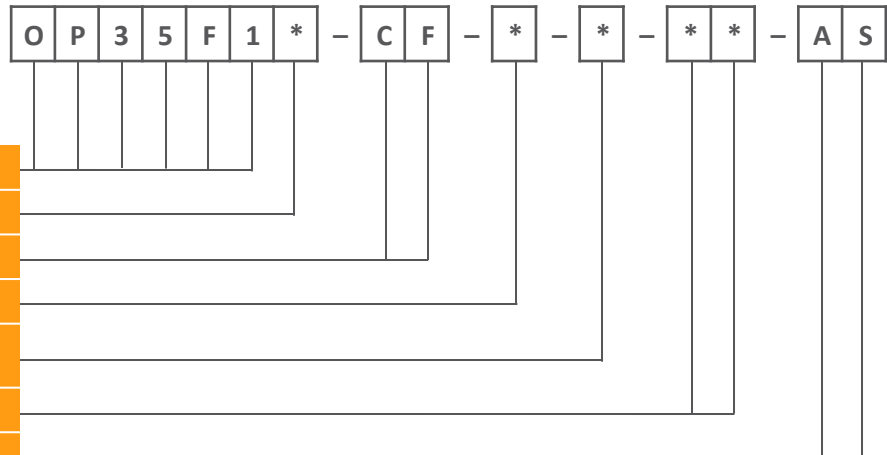
For model numbers of the form OP95F1x-CF-*m-n-ab-xyz*, the variable *n* defines passband options. For *n* = 0, 2, 3, 9 or A, bands are identified as red or blue. For *n* = 4, 5, or 6, bands are identified as CWDM or DWDM. For *n* = 7 or 8, bands are identified by a channel group designator for a range of ITU DWDM channel numbers.



SPECIFICATIONS

Characteristics	Specification			
Physical				
Dimensions	6.5" D x 5.2" H x 1.0" W (3RU) (16.5 cm x 13 cm x 2.5 cm)			
Weight	0.8 lbs (0.36 kg)			
Environmental				
Operating Temperature Range	-20°C to +65°C (-4°F to +149°F)			
Storage Temperature Range	-40°C to +85°C (-40°F to +185°F)			
Humidity	5% to 95% non-condensing			
Optical				
Optical connectors	SC/APC			
Passbands (nm) (specified for values of <i>n</i> in model numbers of the form OP35F1x-CF- <i>m-n</i> -ab-AS)	<i>n</i>	RED		BLUE
	0	1549.0-1563.8		1528.0-1545.6
	2	1562.6-1565.0		1420.0-1561.0
	3	1530.0-1618.0		1264.0-1517.0
	9	1546.7-1561.7 (Chs 20-38)		1530.1-1544.0 (Chs 42-59)
	A	1443.5-1617.5		1263.5-1437.5
	<i>n</i>	CWDM (or RED)		DWDM (or BLUE)
	4	1263.5-1519.0 and 1585.0-1617.5		1530.0-1563.3
	5	1423.5-1519.0 and 1563.5-1617.5		1530.0-1558.4
	6	1423.5-1561.0 and 1583.5-1617.5		1562.0-1564.0
	<i>n</i>	DWDM Channel Group "A"		DWDM Channel Group "B"
	7	1545.7-1565.1 (Chs 18-39)		1423.5-1542.4 and 1568.4-1617.5 (Chs 44-59)
	8	1423.5-1520.8 and 1542.8-1617.5 (Chs 18-43)		1524.3-1539.2 (Chs 48-59)
Ripple within passband	0.5 dB			
Insertion losses, including connectors	Max (and typical) values, in dB, shown for models without and with -20 dB line monitoring taps (<i>yy</i> = 00 and 99, respectively) and with standard or high isolation (<i>m</i> = 1 and 2, respectively)			
		BLUE to COM		RED to COM
	<i>n</i>	<i>m</i>	<i>yy</i> = 00 <i>yy</i> = 99	<i>yy</i> = 00 <i>yy</i> = 99
	0	1	0.6 (0.4) 0.9 (0.7)	0.5 (0.3) 0.8 (0.6)
		2	1.0 (0.8) 1.3 (1.1)	0.5 (0.3) 0.8 (0.6)
	2,3	1	0.5 (0.3) 0.8 (0.6)	0.6 (0.4) 0.9 (0.7)
		2	0.5 (0.3) 0.8 (0.6)	1.0 (0.8) 1.3 (1.1)
	9,A	1	0.5 (0.3) 0.8 (0.6)	0.6 (0.4) 0.9 (0.7)
			DWDM to COM	CWDM to COM
	<i>n</i>	<i>m</i>	<i>yy</i> = 00 <i>yy</i> = 99	<i>yy</i> = 00 <i>yy</i> = 99
	4,5,6	1	0.6 (0.4) 0.9 (0.7)	0.5 (0.3) 0.8 (0.6)
			Ch. Group "B" to COM	Ch. Group "A" to COM
	<i>n</i>	<i>m</i>	<i>yy</i> = 00 <i>yy</i> = 99	<i>yy</i> = 00 <i>yy</i> = 99
	7,8	1	0.6 (0.4) 0.9 (0.7)	0.5 (0.3) 0.8 (0.6)
Power handling, max (any input port)	24.8 dBm			
Directivity, min	55 dB			
Return loss, min	50 dB			
Polarization dependent loss, max	0.15 dB (< 0.1 dB typ)			
Isolation	Minimum values, in dB, shown for models with standard or high isolation (<i>m</i> = 1 and 2, respectively)			
	<i>n</i>	<i>m</i>	BLUE to COM	RED to COM
	0	1	> 25	> 15
		2	> 50	> 15
	2,3	1	> 15	> 25
		2	> 15	> 50
	9,A	1	> 15	> 25
	<i>n</i>	<i>m</i>	DWDM to COM	CWDM to COM
	4,5,6	1	> 25	> 15
	<i>n</i>	<i>m</i>	Ch. Group "B" to COM	Ch. Group "A" to COM
	7,8	1	> 25	> 15
-20 dB tap monitoring option (<i>yy</i> = 99)	1% bi-directional test point for output/input from/to COM port			

ORDERING INFORMATION



- Red/Blue CWDM/DWDM Filter
- * = Number of Filters in Module (S = Single, D = Dual)
- (Reserved Fields)
- * = Blue Band Isolation Option (1 = Standard, 2 = High); see Note 1.
- * = Passband Option (n = 0, 2, 3, 4, 5, 6, 7, 8, 9 or A); reference table for descriptions
- ** = -20 dB Test Port (00 = not present, 99 = present)
- AS = SC/APC Connector

Note:
 1. The high isolation option is available only for Passband Options 0 and 2.

RELATED PRODUCTS

CH3000 Chassis	Optical Patch Cords
Optical Transmitters	Optical Passives
HPON™	Installation Services

Customer Care

Contact Customer Care for product information and sales:

- United States: 866-36-ARRIS
- International: +1-678-473-5656

Note: Specifications are subject to change without notice.

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