

Optical Passives (ISP)

NP35C0x

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

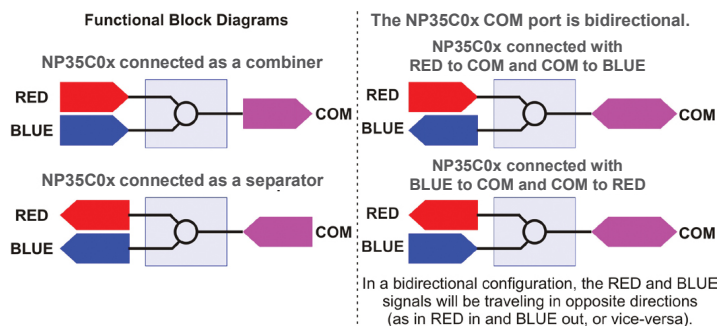
FEATURES

- 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
- Telcordia GR-1209 and GR-1221 qualified
- Occupies one half-depth slot
- LGX chassis-compatible
- Replaces OP35F1x-CF



PRODUCT OVERVIEW

ARRIS NP35C0x 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 pages. 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.



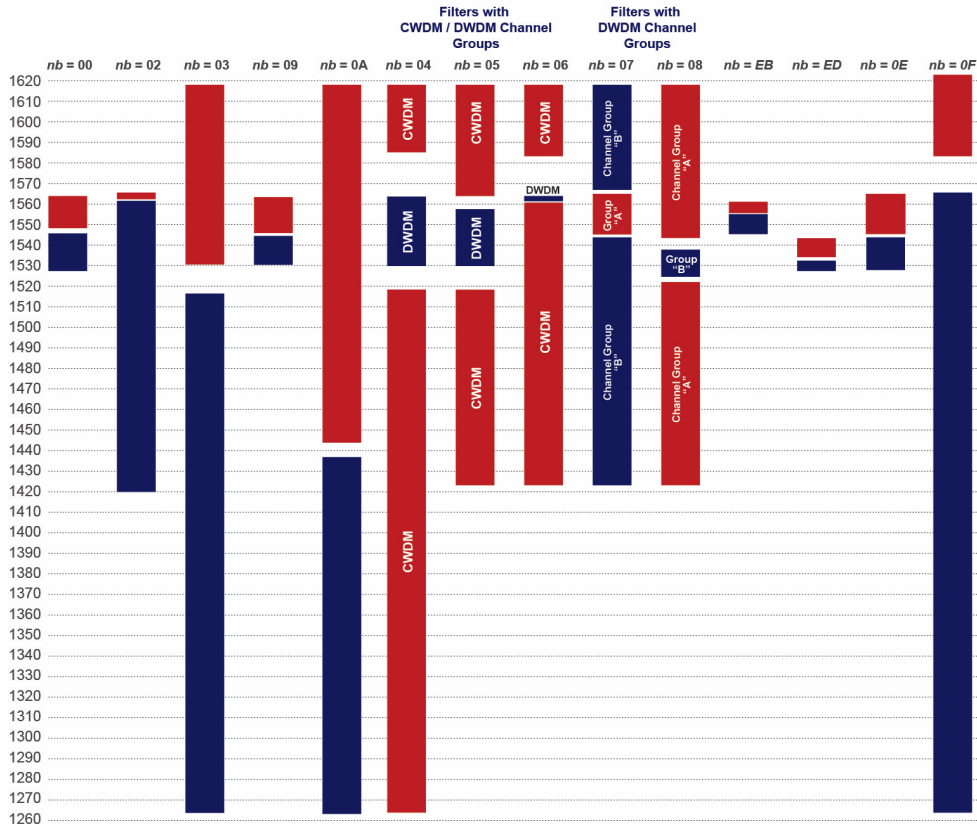
SPECIFICATIONS

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° to +65°C (-4° to +149°F)		
Storage Temperature Range	-40° to +85°C (-40° 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 NP35C0p <i>SnbZmY</i> -0Lx-AS)	<i>nb</i>	RED	BLUE
	00	1549.0-1563.8	1528.0-1545.6
	02	1562.6-1565.0	1420.0-1561.0
	03	1530.0-1618.0	1264.0-1517.0
	09	1546.7-1561.7 (Chs 20-38)	1530.1-1544.0 (Chs 42-59)
	0A	1443.5-1617.5	1263.5-1437.5
	0E	1546.0-1562.4 (Chs 19-39)	1527.1-1542.3 (Chs 44-63)
	0F	1583.5-1655.0	1263.5-1564.8
	EB	1556.430-1560.731	1545.994-1555.065
	ED	1534.125-1542.267	1527.869-1532.023
	<i>nb</i>	CWDM (or RED)	DWDM (or BLUE)
	04	1263.5-1519.0 and 1585.0-1617.5	1530.0-1563.3
	05	1423.5-1519.0 and 1563.5-1617.5	1530.0-1558.4
	06	1423.5-1561.0 and 1583.5-1617.5	1562.0-1564.0
	<i>nb</i>	DWDM Channel Group "A"	DWDM Channel Group "B"
	07	1545.7-1565.1 (Chs 18-39)	1423.5-1542.4 and 1568.4-1617.5 (Chs 44-59)
	08	1423.5-1520.8 and 1542.8-1617.5 (Chs 18-43)	1524.3-1539.2 (Chs 48-59)
Ripple within passband (dB), max	0.5		
Insertion losses (dB) max (typ), including connectors	Without and with -20 dB line monitoring taps (<i>m</i> = 0 or 1, respectively) and with standard or high isolation (<i>Y</i> = S or H, respectively)		
	<i>nb</i>	<i>m</i>	
			BLUE to COM
	00	0	0.6 (0.4) (<i>Y</i> = S), 0.9 (0.7) (<i>Y</i> = H)
		1	1.0 (0.8) (<i>Y</i> = S), 1.3 (1.1) (<i>Y</i> = H)
	02	0	0.5 (0.3) (<i>Y</i> = S), 0.8 (0.6) (<i>Y</i> = H)
		1	0.5 (0.3) (<i>Y</i> = S), 0.8 (0.6) (<i>Y</i> = H)
	03, 09, 0A	0	0.5 (0.3) (<i>Y</i> = S), 0.8 (0.6) (<i>Y</i> = H)
	EB, ED	0	0.5 (0.3) (<i>Y</i> = S)
	0E	0	0.5 (0.3) (<i>Y</i> = S)
	0F	0	0.6 (0.4) (<i>Y</i> = S)
			RED to COM
	00	0	0.5 (0.3) (<i>Y</i> = S), 0.8 (0.6) (<i>Y</i> = H)
		1	1.0 (0.8) (<i>Y</i> = S), 1.3 (1.1) (<i>Y</i> = H)
	02	0	0.6 (0.4) (<i>Y</i> = S), 0.9 (0.7) (<i>Y</i> = H)
		1	1.0 (0.8) (<i>Y</i> = S), 1.3 (1.1) (<i>Y</i> = H)
	03, 09, 0A	0	0.6 (0.4) (<i>Y</i> = S), 0.9 (0.7) (<i>Y</i> = H)
	EB, ED	0	0.7 (0.5) (<i>Y</i> = S)
	0E	0	0.6 (0.4) (<i>Y</i> = S)
	0F	0	0.5 (0.3) (<i>Y</i> = S)
	<i>nb</i>	<i>m</i>	
			DWDM to COM
	04, 05, 06	0	0.6 (0.4) (<i>Y</i> = S), 0.9 (0.7) (<i>Y</i> = H)
		1	1.0 (0.8) (<i>Y</i> = S), 1.3 (1.1) (<i>Y</i> = H)
	<i>nb</i>	<i>m</i>	
			Ch. Group "B" to COM
	07, 08	0	0.6 (0.4) (<i>Y</i> = S), 0.9 (0.7) (<i>Y</i> = H)
		1	1.0 (0.8) (<i>Y</i> = S), 1.3 (1.1) (<i>Y</i> = H)
	<i>nb</i>	<i>m</i>	
			Ch. Group "A" to COM
	07, 08	0	0.5 (0.3) (<i>Y</i> = S), 0.8 (0.6) (<i>Y</i> = H)
		1	1.0 (0.8) (<i>Y</i> = S), 1.3 (1.1) (<i>Y</i> = H)
Power handling, max (any input port)	24.8 dBm		
Directivity, min	55 dB		
Return loss, min	50 dB		

SPECIFICATIONS CONTINUED

Characteristics	Specification			
Optical (continued)				
Polarization dependent loss (dB), max (typ)	0.15 (0.1)			
Isolation (dB), min	Minimum values, in dB, shown for models with standard or high isolation (Y = S or H, respectively)			
	<i>nb</i>	Y	BLUE to COM	RED to COM
	00	S	25	15
		H	50	26
	02	S	15	25
		H	26	50
	03, 09, 0A	S	15	25
	EB, ED	S	15	30
	0E	S	25	15
	0F	S	15	25
	<i>nb</i>	Y	DWDM to COM	CWDM to COM
	04, 05, 06	S	25	15
	<i>nb</i>	Y	Ch. Group "B" to COM	Ch. Group "A" to COM
	07, 08	S	25	15
-20 dB tap monitoring option (<i>m</i> = 1)				
Bi-directional test point for output/input from/to COM port				

Passbands for Combiner/Separator Filters



For *nb* = 00, 02, 03, 09, 0A, EB, ED, 0E, or 0F, bands are identified as red or blue.

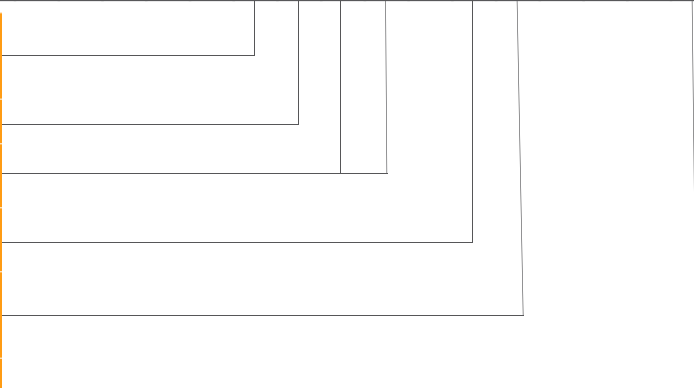
For *nb* = 04, 05, or 06, bands are identified as CWDM or DWDM.

For *nb* = 07 or 08, bands are identified by a channel group designator for a range of ITU DWDM channel numbers.

ORDERING INFORMATION

N	P	3	5	C	0	*	*	*	*	Z	*	*	-	0	L	*	-	A	S
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- * = Number of different filters in a module [1 = one or 2 = two ("2" is applicable only to nb = ED and contains one nb = EB and one nb = ED filter in the same enclosure)]
- * = Number of identical filters in a module (S = Single, D = Dual)
- * = Passband Option (nb = 00, 02, 03, 04, 05, 06, 07, 08, 09, 0A, 0E, 0F, EB, or ED); (See the table on the previous page for descriptions.)
- * = -20 dB Test Port (0 = not present, 1 = present (available with pass-band options nb = 00, 05, 06, 07, 08, and 09))
- * = Blue Band Isolation Option (S = Standard, H = High) (The high-isolation option is available only for Passband Options nb = 00 and 02.)
- * = Channel plan [A = Standard or E = CORWave 3 (applicable only to nb = EB or ED) or D (applicable only to nb = 0E)]



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Note: Specifications are subject to change without notice.

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