Optical Passives (ISP)

NP35F04S

4-channel DWDM Optical Filter

FEATURES

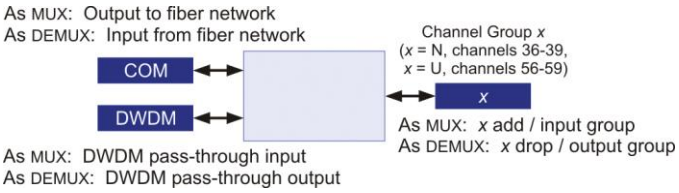
- Add or drop a group of four wavelengths on the 100 GHz DWDM ITU Grid
- Low insertion loss
- 4-skip-0 filter
- Optional line monitoring tap
- SC/APC connectors ensure performance repeatability, compatibility and easy installation and maintenance
- Removable adapters for easy cleaning
- Occupies one half-depth slot
- Telcordia GR-1209 and GR-1221 qualified
- LGX chassis-compatible
- Replaces OP35F4S

PRODUCT OVERVIEW

The ARRIS NP35F04S series 4-channel DWDM Optical Filters have been designed with low insertion loss. These three-port filters are used to add (or drop) a group of four DWDM narrowcast wavelengths to (or from) a set of DWDM optical wavelengths. Two models are available, with channel group N used to add or drop channels 36 through 39, and channel group U used to add or drop channels 56 through 59.

The filter is packaged in an LGX compatible module and can be mounted in the ARRIS CH3000 chassis, occupying one half-depth slot. It is 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 4.3" H x 1.0" W (3RU) (16.5 cm x 11 cm x 2.5 cm)		
Weight	1.5 lbs (0.68 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 Interface			
Optical connectors	SC/APC		
Mux input/output ports		Function as MUX	Function as DEMUX
	DWDM	DWDM pass-through input	DWDM pass-through output
	GRP *x*	*x* add/input channel group	*x* drop/output channel group
	COM	output to fiber network	input from fiber network
			
TP, -20 dB	Optional bi-directional 1% tap, test point from COM		
Optical			
Insertion losses, max, including connectors		with 1% tap	without 1% tap
	GRP *x* to COM	1.0 dB	0.8 dB
	DWDM to COM	0.8 dB	0.6 dB
Directivity, min	50 dB		
Passband @ 0.15 dB			
GRP x to COM	2.6 nm		
DWDM to COM	Passes 1423.5 nm through 1617.5 nm with a notch at the Channel Group add/drop band.		
Return loss, min	45 dB		
Polarization dependent loss, max	0.1 dB (< 0.05 dB typ)		
Adjacent channel isolation, min	25 dB		
Non-adjacent channel isolation, min	45 dB		
Reflect port isolation, min	12 dB		
Power handling, max (any input port)	21.8 dBm		
Channel spacing	100 GHz		
Channel groups	See the table on Page 3.		
ITU Channel Plans			
	ARRIS supports DWDM network architectures with a variety of products having 100 GHz center frequency spacing on the standard DWDM ITU Grid (ITU-T G.694.1) for 40 channels from Channel 20 (1561.42 nm) to Channel 59 (1530.334 nm). For more complete description of available DWDM ITU Grid channels and ARRIS's partitioning into convenient logical groups, please refer to the table on Page 3.		
	When ordering DWDM Optical Filters, please note, for network planning purposes, that AT3550 "BC" series broadcast transmitters operate at 1545.3 nm ± 0.9 nm, occupying the approximate region of DWDM ITU Grid channels 39 through 41; as a result, a Channel Group N filter should not be used in that case.		

ORDERING INFORMATION

N	P	3	5	F	0	4	S	0	*	A	*	S	–	0	L	A	–	A	S

*** = DWDM ITU Channel Group J, K, L, N, P, R, S, T, or U (See tables below.)**

*** = –20 dB Test Port (0 = not present, 1 = present)**

Channel Group	ITU Channel #	Wavelength (nm)	Optical frequency (THz)
J	Channel # 20	1561.419	192.0
	Channel # 21	1560.606	192.1
	Channel # 22	1559.794	192.2
	Channel # 23	1558.983	192.3
K	Channel # 24	1558.173	192.4
	Channel # 25	1557.363	192.5
	Channel # 26	1556.555	192.6
	Channel # 27	1555.747	192.7
L	Channel # 28	1554.940	192.8
	Channel # 29	1554.134	192.9
	Channel # 30	1553.329	193.0
	Channel # 31	1552.524	193.1
N	Channel # 36	1548.515	193.6
	Channel # 37	1547.715	193.7
	Channel # 38	1546.917	193.8
	Channel # 39	1546.119	193.9
P	Channel # 40	1545.322	194.0
	Channel # 41	1544.526	194.1
	Channel # 42	1543.730	194.2
	Channel # 43	1542.936	194.3

Channel Group	ITU Channel #	Wavelength (nm)	Optical frequency (THz)
R	Channel # 44	1542.142	194.4
	Channel # 45	1541.349	194.5
	Channel # 46	1540.557	194.6
	Channel # 47	1539.766	194.7
S	Channel # 48	1538.976	194.8
	Channel # 49	1538.186	194.9
	Channel # 50	1537.397	195.0
	Channel # 51	1536.609	195.1
T	Channel # 52	1535.822	195.2
	Channel # 53	1535.036	195.3
	Channel # 54	1534.250	195.4
	Channel # 55	1533.465	195.5
U	Channel # 56	1532.681	195.6
	Channel # 57	1531.898	195.7
	Channel # 58	1531.116	195.8
	Channel # 59	1530.334	195.9

RELATED PRODUCTS

CH3000 Chassis	Optical Patch Cords
Optical Transmitters	Optical Passives
PF3000	

Customer Care

Contact Customer Care for product information and sales:

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Note: Specifications are subject to change without notice.

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