

Optical Passives (ISP)

OP34F1D

Single-channel CWDM Optical Filter

FEATURES

- Designed for use with uncooled lasers based on 20 nm channel spacing
- Flat and wide operating passband on CWDM ITU grid (20 nm spacing)
- High channel isolation to minimize crosstalk
- Low Polarization Dependent Loss (PDL)
- Telcordia GR-1209 and GR-1221 qualified, providing excellent environmental and mechanical stability
- Removable adapters for easy cleaning
- Industry's highest packaging density (up to 32 modules per chassis)
- Occupies one half-depth slot



PRODUCT OVERVIEW

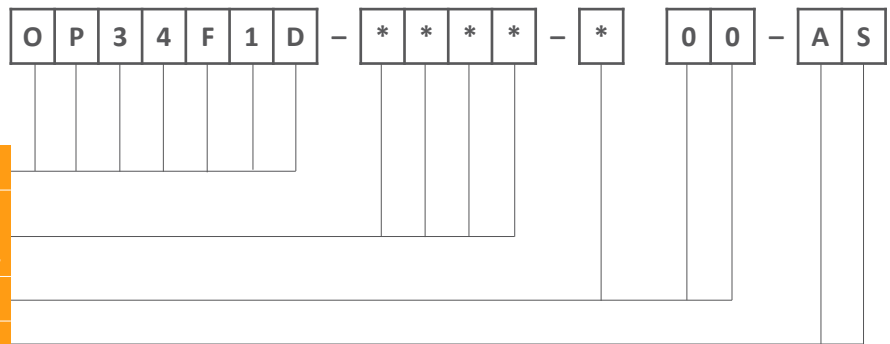
The ARRIS OP34F1D series Single-channel CWDM Optical Filters are three-port filters that are used to add/drop a CWDM wavelength to/from a set of CWDM optical wavelengths, where the wavelengths are 1270, 1290, ..., 1350, 1430, 1450, ..., 1610 nm on the CWDM ITU grid (i.e., with 20 nm spacing). Each OP34F1D module contains two sets of identical filters (performing add/drop functions on the same CWDM wavelength).

These filters have been designed with low insertion loss and high channel isolation, and are packaged in ARRIS's very compact half-depth module for mounting in the CH3000 chassis or PF3000 frame. The packaging concept for ARRIS's family of optical passives is similar to the well-recognized LGX package; and, although ARRIS's version of the LGX module is slightly narrower (for higher packaging density), it will also mount in any standard LGX chassis. ARRIS's implementation maintains the advantages of the LGX concept (which enables easy, snap-in installation) while providing higher packaging density, greater flexibility and scalability to the network operator.

SPECIFICATIONS

Characteristics	Specification
Physical	
Dimensions	6.5" D x 4.3" H x 1.0" W (3RU) (17 cm x 11 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 Interface	
Optical connectors	SC/APC
Mux input/output ports (for each of two filters)	Function as MUX output to fiber network
COM	Function as DEMUX input from fiber network
CWDM	CWDM pass-through input CWDM pass-through output
Ch xxxx I/O	xxxx add/input channel xxxx drop/output channel
Wavelength Pass-through	
1270–1350 models	Only wavelength between 1264.5–1357.5 nm pass
1430–1610 models	Only wavelength between 1424.5–1617.5 nm pass
Optical	
Channel spacing	20 nm
Channel plan (CWDM wavelengths)	<i>See Ordering Information</i>
Passband @ 0.5 dB	± 6.5 nm
Ripple within passband	0.5 dB
Return loss, min	45 dB
Polarization dependent loss, max	0.07 dB (< 0.05 dB typ)
Power handling, max (any input port)	21.8 dBm
Insertion losses (including connectors), max	
Ch xxxx I/O	0.7 dB
CWDM I/O to COM	
Models with Standard cascade isolation	0.6 dB
Models with High cascade isolation	0.9 dB
Adjacent channel isolation, min	35 dB
Non-adjacent channel isolation, min	45 dB
Cascade isolation, min	
Models with Standard cascade isolation	12 dB
Models with High cascade isolation	25 dB
Directivity, min	50 dB

ORDERING INFORMATION



Dual-packaged Single-channel CWDM Filters

**** = CWDM Wavelength (1270, 1290, ..., 1350, 1430, 1450, ..., 1610 nm)
 Specified wavelength is used for each of two filters in the module.

* = Cascade Isolation Level (See Note 1) (0 = Standard, 3 = High)

AS = SC/APC Connector

Note:

1. High Cascade Isolation Level available only for 1550 nm

RELATED PRODUCTS

CH3000 Chassis

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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