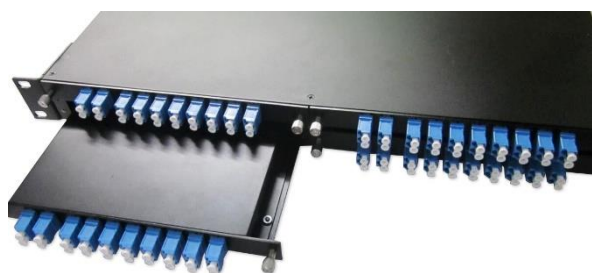




Thin Flim Filter DWDM 100GHz MUX/DEMUX module

Part Number: FDWM-xxxxxxxx-xxxxx-xx



Overview

Ficer's Dense Wavelength Division Multiplexer modules are part of a series of high performance product based on Thin Flim Filter (TFF) technology for passive DWDM solution. This product range offers a combination of low loss and high channel isolation along with long term reliability and low cost per channel with 100GHz channel spacing. Each module can perform MUX and DEMUX functions. The 1U~2U Rack including LGX package style allows users install such module easily with compact dimension in sites.

Applications

- DWDM systems
- WDM based on ADM
- Metro and Long-Hual networks
- Wavelength selective routing
- CATV and PON networks

Features

- High Stability and Reliability
- Low Insertion Loss
- Low PDL
- High Channel Isolation
- No electrical power required
- No temperature control required

Absolute Maximum Ratings

Parameters	Min.	Max.	Unit
Operating Temperature	-5	+70	°C
Operating Humidity	5	95	%RH
Storage Temperature	-40	+85	°C
Storage Humidity	5	95	%RH



Optical Specifications

Parameters	Min.	Typ.	Max.	Unit	Note
Center Wavelength Range	C61(1528.77nm) ~ C15(1565.50nm) per ITU-Grid				
Channel Spacing	100GHz (0.8nm)				
Fiber Type	SMF-28e or equivalent Single Mode Fiber				
Center Wavelength Accuracy	±0.05			nm	
Channel Passband (@-0.5dB) (nm)	0.22			nm	
Passband Ripple (dB)			0.5	dB	
Optical Insertion Loss at ITU grid (for MUX or DEMUX only, not for Pair Loss of MUX+DEMUX)	4CH	8CH	16CH		1
	<1.8	<3.0	<4.0	dB	
	24CH	32CH	40CH		
	<4.8	<5.6	<6.2	dB	
Adjacent Channel Isolation	30			dB	
Non-Adjacent Channel Isolation	40			dB	
PDL / Polarization Dependent Loss			0.2	dB	2
PMD / Polarization Mode Dispersion			0.1	ps	
Optical Return Loss	40			dB	
Directivity	50			dB	
Maximum Optical Power			300	mW	
1U 19" Rack-Mount Dimension	432(W) x 44(H) x 200(D)			mm	3

Note 1. IL represents the worst case over a ±0.08nm window around the ITU wavelength without Connector Loss.

Note 2. PDL was measured on average polarization over a ±0.08nm window around the ITU wavelength.

Note 3. The Width Dimension 432mm is for the main package body only.



ITU Grid 100GHz DWDM Central Wavelength Table

Channel	Central Wavelength(nm)	Frequency (GHZ)
C61	1528.77	196,100
C60	1529.55	196,000
C59	1530.33	195,900
C58	1531.12	195,800
C57	1531.90	195,700
C56	1532.68	195,600
C55	1533.47	195,500
C54	1534.25	195,400
C53	1535.04	195,300
C52	1535.82	195,200
C51	1536.61	195,100
C50	1537.40	195,000
C49	1538.19	194,900
C48	1538.98	194,800
C47	1539.77	194,700
C46	1540.56	194,600
C45	1541.35	194,500
C44	1542.14	194,400
C43	1542.94	194,300
C42	1543.73	194,200
C41	1544.53	194,100
C40	1545.32	194,000
C39	1546.12	193,900
C38	1546.92	193,800
C37	1547.72	193,700
C36	1548.51	193,600
C35	1549.32	193,500
C34	1550.12	193,400
C33	1550.92	193,300
C32	1551.72	193,200
C31	1552.52	193,100



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C30	1553.33	193,000
C29	1554.13	192,900
C28	1554.94	192,800
C27	1555.75	192,700
C26	1556.55	192,600
C25	1557.36	192,500
C24	1558.17	192,400
C23	1558.98	192,300
C22	1559.79	192,200
C21	1560.61	192,100
C20	1561.42	192,000
C19	1562.23	191,900
C18	1563.05	191,800
C17	1563.86	191,700
C16	1564.68	191,600
C15	1565.50	191,500



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Ordering Information

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