



Thin Film Filter DWDM 100GHz 8CH (CH21, 23, 25, 27, 31, 33, 35, 37) MUX + DEMUX with Express port, 1% Monitor port in 1U Rack

Part Number: FWDM-08U2137E1-RBA1U-SP



Overview:

Ficer's Dense Wavelength Division Multiplexer modules are part of a series of high performance product based on Thin Film 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 (0.8nm) channel spacing. Each module can perform MUX and DEMUX functions. The 1U Rack package allows users install it easily on 19" or 23" Rack Frame.

Applications:

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

Features:

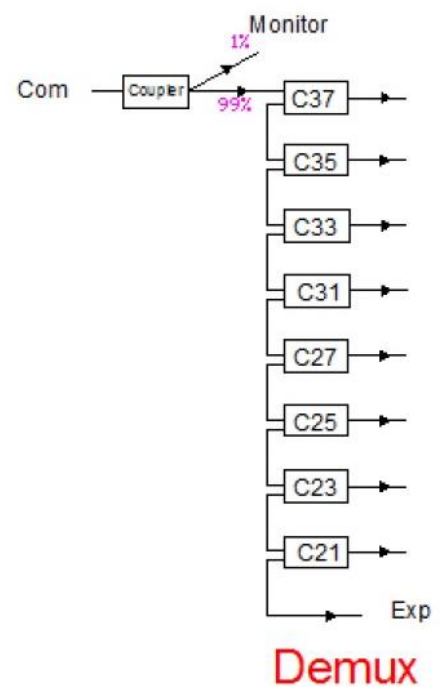
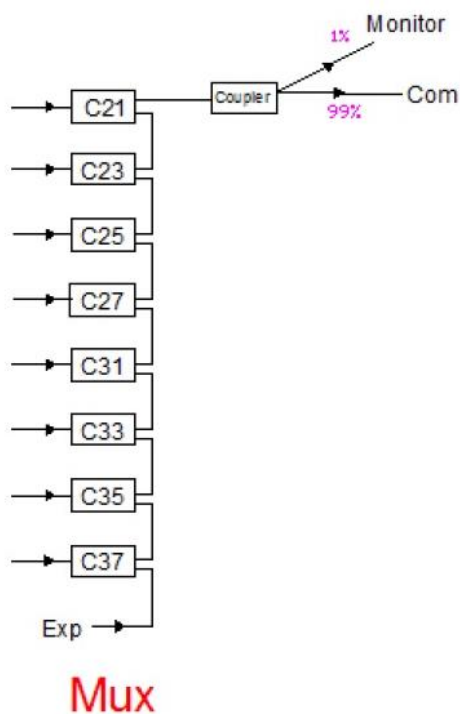
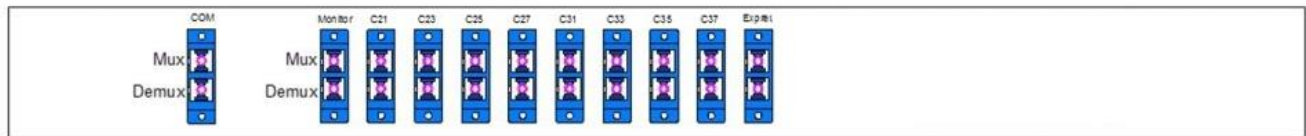
- High Stability and Reliability
- Low Insertion Loss
- Low PDL
- High Channel Isolation
- No electrical power required
- No temperature control required

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 Port and Function:





Optical Specifications:

Parameters	Min.	Typ.	Max.	Unit	Note
Channel Spacing	100GHz (0.8nm)				
Channel Number	8CH (CH21, 23, 25, 27, 31, 33, 35, 37)				
Fiber Type	SMF-28e or equivalent Single Mode Fiber				
Center Wavelength	ITU-Grid (100GHz)			nm	
Center Wavelength Accuracy	±0.05			nm	
Channel Passband (@-0.5dB)	0.22			nm	
Channel Ripple			0.5	dB	
Channel Uniformity			1.5	dB	
Optical Insertion Loss			3.0	dB	1
System Channel Pair Loss			4.5	dB	
Express / Expansion Port Loss			4.0	dB	
Monitor Port	0.5~1			%	
Non-Adjacent Channel Isolation	40			dB	
PDL / Polarization Dependent Loss			0.2	dB	2
PMD / Polarization Mode Dispersion			0.1	ps	
Optical Return Loss			-45	dB	
Directivity			-50	dB	
Maximum Optical Power			300	mW	
Connector Type	Simplex SC/UPC				
1U Rack-Mount Dimension	432(W) x 120(D) x 44(H)			mm	3

Note1: IL represents the worst case over a ±0.08nm window around the ITU wavelength without Connector Loss.

Note2: PDL was measured on average polarization over a ±0.08nm window around the ITU wavelength.

Note3: The Width Dimension 431.5mm is for the main package body only, Mounting Ear for 19" or 23" Rack.



ITU Grid 100GHz DWDM Central Wavelength Table:

Channel	Central Wavelength (nm)	Frequency (THZ)
CH21	1560.61	192.1
CH23	1558.98	192.3
CH25	1557.36	192.5
CH27	1555.75	192.7
CH31	1552.52	193.1
CH33	1550.92	193.3
CH35	1549.32	193.5
CH37	1547.72	193.7

Mechanical Dimensions:

