

## 4/8/16Channels 100GHz Dense Wavelength Division Multiplexer

### Description

Takfly's DWDM ABS type module is a wavelength division multiplexing technology based on TFF (Thin Film Filter), with multiple wavelength options; It multiplexes optical signals of different wavelengths into a single fiber for transmission, and uses demultiplexing at the receiving end to decompose the signals in the fiber into signals of different wavelengths; DWDM has channel spacing of 100GHz, 200GHz, and other channels, suitable for long-distance, high-capacity and long-distance trunk networks, or ultra large capacity metropolitan area network core nodes.



### Features

- Low Insertion Loss
- Wide pass band
- High Channel Isolation
- High Stability and reliability

### Applications

- Channel Add/Drop
- DWDM Network
- Fiber Optical Amplifier

## Specifications

| Parameter                                      |              | 4 Channel                                                                                                      |       | 8 Channel |       | 16 Channel |       |
|------------------------------------------------|--------------|----------------------------------------------------------------------------------------------------------------|-------|-----------|-------|------------|-------|
|                                                |              | Mux                                                                                                            | Demux | Mux       | Demux | Mux        | Demux |
| Channel Wavelength(nm)                         |              | ITU 100 GHz Grid+1270-1350                                                                                     |       |           |       |            |       |
| Center wavelength Accuracy(nm)                 |              | ±0.05                                                                                                          |       |           |       |            |       |
| Channel Spacing (GHz) GHz)                     |              | 100                                                                                                            |       |           |       |            |       |
| Channel Passband (@-0.5dB bandwidth) (nm)      |              | ≥0.22                                                                                                          |       |           |       |            |       |
| Insertion Loss                                 |              | ≤1.6                                                                                                           |       | ≤2.5      |       | ≤3.5       |       |
| Channel Uniformity                             |              | ≤0.6                                                                                                           |       | ≤1.0      |       | ≤1.5       |       |
| Channel Ripple                                 |              | 0.3                                                                                                            |       | 0.3       |       | 0.3        |       |
| Isolation                                      | Adjacent     | N/A                                                                                                            | >30   | N/A       | >30   | N/A        | >30   |
|                                                | Non-adjacent | N/A                                                                                                            | >40   | N/A       | >40   | N/A        | >40   |
| Insertion Loss Temperature Sensitivity (dB/°C) |              | ≤0.005                                                                                                         |       |           |       |            |       |
| Wavelength Temperature Shifting(°C)            |              | <0.002                                                                                                         |       |           |       |            |       |
| Polarization Dependent Loss(dB)                |              | <0.1                                                                                                           |       |           |       |            |       |
| Polarization Mode Dispersion(PS)               |              | <0.1                                                                                                           |       |           |       |            |       |
| Directivity(dB)                                |              | >50                                                                                                            |       |           |       |            |       |
| Return Loss (dB)                               |              | >45                                                                                                            |       |           |       |            |       |
| Maximum Power Handling (mW)                    |              | 500                                                                                                            |       |           |       |            |       |
| Operating Temperature(°C)                      |              | -5~+75                                                                                                         |       |           |       |            |       |
| Storage Temperature(°C)                        |              | -40~85                                                                                                         |       |           |       |            |       |
| Package dimension(mm)                          |              | 1. L100 x W80 x H10 ( 2 CH ~ 8CH Module)<br>2. L140xW100xH15 ( 9 CH ~ 18CH Module))<br>3. 19 1U Rack<br>4. LGX |       |           |       |            |       |

Above specification are for device without connector

## Order Information

| Configuration | Channel No.  | Channel      | Pigtail Type | Fiber length | Dimension (mm)     | Connector |
|---------------|--------------|--------------|--------------|--------------|--------------------|-----------|
| M=Mux         | 04=4 Channel | C20= 1561.42 | 0=250um      | 1=1m         | 1= L100 x W80 xH10 | 0=None    |
| D=Demux       | 08=8 Channel | nm           | 1=900um      | 2=1.5m       | 2=L140xW100xH15    | 1=FC/APC  |
|               | 16=16        | C21= 1560.61 | 2=2.0mm      | 3=others     | 3=19 1U Rack       | 2=FC/PC   |
|               | Channel      | nm           | 3=3.0mm      |              |                    | 3=SC/APC  |
|               | N=N Channel  |              |              |              |                    | 4=SC/PC   |
|               | .....        | .....        |              |              |                    | 5=others  |