

### Key Features

- Ultra-Low Insertion Loss
- TFF Free-space Technology
- Passive module, no need electrical power
- Stable Operating Temperatures
- Customized Bands Combination

### Applications

- Hybrid DWDM over CWDM Networks
- Expansion Port for Future Bandwidth Increasing
- 5G Networks



# Ultra Compact WDM

## Ultra Compact CWDM-DWDM Hybrid



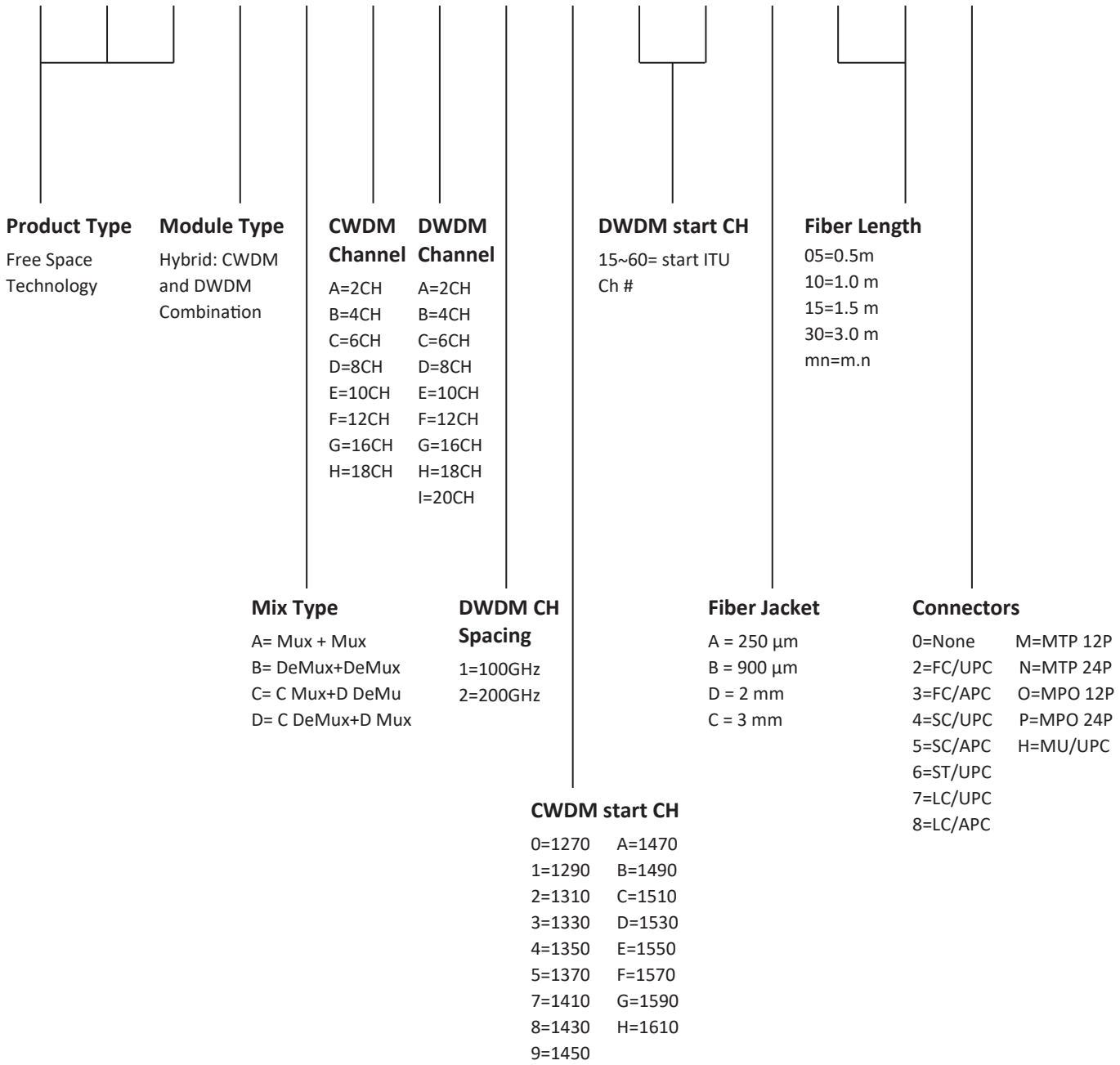
### Parameter Specifications

Parameters	Specifications	Units
Operating Wavelength	1420 ~ 1620	nm
Central Wavelength for CWDM	1430, 1450, 1470, 1490, 1510, 1530, 1570, 1590	nm
Central Wavelength for DWDM	C band, ITU# 15~60	nm
Channel Passband for CWDM	$\lambda$ ITU + 6.5	nm
Channel Passband for DWDM	$\lambda$ ITU + 0.11	nm
Passband Ripple	$\leq 0.5$	dB
Insertion Loss – 4CH (4 CWDMs + 4 DWDMs)	$\leq 2.0$ (typical: 1.5)	dB
Insertion Loss – 8CH (8 CWDMs + 8 DWDMs)	$\leq 3.0$ (typical: 2.2)	dB
Insertion Loss – 10CH (8 CWDMs + 10 DWDMs)	$\leq 3.5$ (typical: 2.6 )	dB
Insertion Loss – 16CH (8 CWDMs + 16 DWDMs)	$\leq 4.0$ (typical:3.2 )	dB
Isolation (adjacent channel)	$\geq 30$	dB
Isolation (non-adjacent channel)	$\geq 45$	dB
Polarization Dependent Loss	$\leq 0.3$	dB
Return Loss (at channels)	$\leq 45$	dB
Directivity	$\leq 55$	dB
Maximum Power Handling	300	mW
Operating Temperature	-5 to 70	°C
Storage Temperature	-40 to 85	°C
Package Dimension	OptiWorks Standard Ultra Compact Package	mm

Note:

1. All parameters are referenced without connectors. Typical connector loss 0.25 dB/pair.

Part Number Scheme: Ultra Compact CWDM/DWDM Hybrid Modules



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