

Tap Isolator/Filter Wavelength Division Multiplexer Hybrid (DL-TIWDM-T-U-V-W-X-Y-Z)

The TIWDM series combines Filter WDM, Tap Coupler and Isolator into a compact package. It is ideal for fiber amplifier application to provide input signal power monitoring, pump/signal multiplexing and isolation functions at the same time. It offers the advantages of cost saving, space saving, as well as performance improvement.

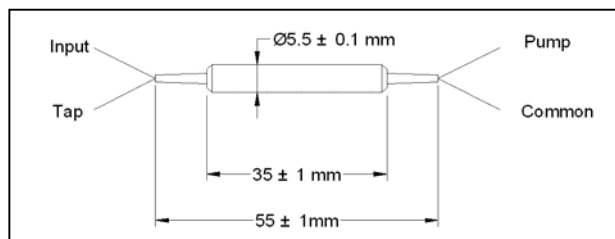
A. Specifications

Parameter		Single Stage	Dual Stage	Unit
Pass Band	Signal Wavelength Range	1530 - 1580		nm
980 Pump	Max. IL @ Input→Common, Tap 1%, 2%, 3% 4%, 5% 10%	1.0	1.2	dB
		1.2	1.4	
		1.5	1.7	
1480 Pump	Max. IL @ Input→Common, Tap 1%, 2%, 3% 4%, 5% 10%	1.0	1.2	dB
		1.1	1.3	
		1.3	1.5	
	Min. Signal Isolation (1550 ± 10 nm for single stage, 1550 ± 30 nm for dual stage, at 23 °C)	30	40	dB
	Max. Polarization Dependent Loss	0.1	0.2	dB
	Max. Polarization Mode Dispersion	0.25 ¹	0.05	ps
Reflection Band	Center Wavelength (λ _c)	980 / 1480		nm
	Operating Wavelength	λ _c ± 40 nm		
	Max. Insertion Loss	0.5		
	Typ. Insertion Loss	0.3		
	Max. Polarization Dependent Loss	0.05		
980 and 1480 Tap	Port Inport→Tap			
	Max. Inersion Loss @ Inport→Tap for 10% Tap Ratio	11.5	11.5	dB
Min. Return Loss		1 ± 0.2, 2 ± 0.4, 3 ± 0.6, 4 ± 0.8, 5 ± 1		%
Max. Optical Power (Continuous Wave)		50		dB
Max. Tensile Load		300		mW
Fiber Type		5		N
Operating Temperature		SMF-28 or HI 1060 fiber		
Storage Temperature		-5 to +70		°C
		-40 to +85		°C

¹ Low PMD version is available. PMD < 0.05 ps

*IL is 0.3 dB higher, RL is 5 dB lower, and ER is 2 dB lower for each connector added.

B. Package Dimensions



C. Ordering Information DL-TIWDM-T-U-V-W-X-Y-Z

T: Pump Type	V: Tap Ratio	W: PMD	X: Connector Type	Y: Fiber Type (SMF-28/HI 1060)
98 - 980 nm pump	1 - 1% ± 0.2	1 - 0.05 ps max	1 - FC/UPC	B - 250 μm bare fiber
48 - 1480 nm pump	2 - 2% ± 0.4	2 - Refer to above spec	2 - FC/APC	L - 900 μm loose tube
	3 - 3% ± 0.6		3 - SC/UPC	S - Specify
U: Stage Type	4 - 4% ± 0.8		4 - SC/APC	
1 - Single stage	5 - 5% ± 1.0		N - None	Z: Fiber Length
2 - Dual stage	S - Specify		S - Specify	1 - 1.0 m
				S - Specify

Remark: SMF-28 fiber is used for 1550 nm and 1480 nm and HI 1060 fiber is used for Pump and Common channel.