



1480/1550 nm WDM/Tap Coupler/Isolator Hybrid Combination

AC Photonics' WTIH is a combination of a wavelength division multiplexer, tap coupler and an isolator in a compact package. This product has an extremely low insertion loss, a very stable tap-coupling ratio, high isolation, and high return loss. The WTIH is ideal for fiber optic amplifier applications. All AC Photonics' products are Telcordia qualification tested.



Features

- Wide Operating Wavelength Range
- Compact Size
- Low Insertion Loss
- High Channel Isolation
- Ultra Low PDL & PMD
- High Stability and Reliability
- Epoxy Free Optical Path

Applications

- Fiberoptic Amplifiers
- CATV Fiberoptic Links
- WDM Systems
- Fiberoptic Instruments
- Transmitters and Fiber Lasers
- Laboratory R&D

Performance Specifications

Parameter		Single Stage	Dual Stage
Signal Operation Wavelength Range (nm)	C band	1530~1565	
	L band	1570~1605	
Pump Channel Wavelength Range (nm)		1450~1490	
Isolation (dB) (@ 23°C all SOP)		≥31	≥45
Isolation (dB) (2 to 4 @ λ signal)		≥12	
Isolation (dB) (1 to 2 @ λ pump)		≥30	
Insertion Loss (over wavelength range and 0 to +70° C , all SOP) (dB)	Pump Channel	≤ 0.6	
	Signal Channel	≤1.1	≤1.3
	Nominal Tap Ratio 1%	19.0~20.8	
	Nominal Tap Ratio 2%	16.2~18.0	
Nominal Tap Ratio 5%		12.2~14.0	
Wavelength Dependent Loss (dB)		≤0.5	
Return Loss (dB)		≥50	
Directivity (dB)		≥55	
PDL (dB)		≤0.1	
PMD (ps)(Low PMD Option)		≤0.25(0.05)	≤0.05
Power Handling (mW)		300	
Operating Temperature (°C)		0 ~+70	
Storage Temperature (° C)		-40 ~+85	
Dimensions (mm)		φ5.5 x L38	
Fiber Type		Corning SMF-28 fiber	

Values are referenced without connector loss. Specifications may change without notice.

Ordering Information

WTIH	□ □	□	□	□	□	□ □
	Wavelength	Stage	Tap Ratio	Pigtail Style	Fiber Length	In/Out Connector
	54=1550/1480nm 64=1585/1480nm	S=Single Stage U=Dual Stage	1=1% 2=2% 5=5%	1=Bare Fiber 2=900um Jacket	1=1m 2=2m	0=None 1=FC/APC 2=FC/PC 3=SC/APC 4=SC/PC 5=ST 6=LC



Dimensions

