

# 980/1550 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 hight 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 on Optical Path

#### Applications

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

### **Performance Specifications**

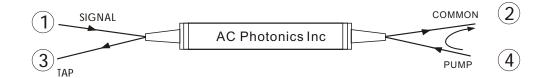
Parameter	Single Stage	Dual Stage	
Signal Operation Wavelength Range (nm)	C band	1528~1564	
Signal Operation wavelength Range (IIII)	L band	1570~1605	
Pump Channel Wavelength Range (nm)	965~1000		
Isolation (dB) (@23°C all SOP)	<u>≥</u> 31 <u>≥</u> 45		
Isolation (dB) (2 to 4 @ $\lambda$ signal)	<u>≥</u> 12		
Isolation (dB) (1to 2 @ $\lambda$ pump)	<u>&gt;</u> 30		
Insertion Loss (overwavelength range and 0 to+70°C ,all SOP)(dB)	Pump Channel	<u>&lt;</u> 0.6	
	Signal Channel	<u>≤</u> 1.3	<u>&lt;</u> 1.4
	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 Dependant Loss (dB)	<u>≤</u> 0.5		
Return Loss (dB)	<u>&gt;</u> 50		
Directivity (dB)	<u>&gt;</u> 55		
PDL (dB)	<u>&lt;</u> 0.1		
PMD (ps)(Low PMD Option)	<u>&lt;</u> 0.25(0.05)	<u>&lt;</u> 0.05	
Power Handling (mW)	300		
Operating Temperature (°C)	0 ~+70		
Storage Temperature (°C)	-40 ~+85		
Dimensions (mm)	Ф5.5 x L38		
Fiber Type		Corning HI 1060 fiber at common/pump port	
		Corning SMF-28 fiber at signal/tap	

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

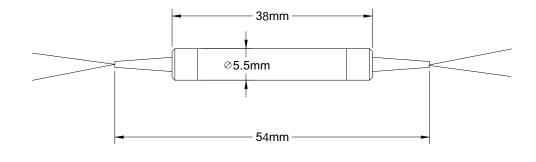


## **Ordering Information**

WTIH						
	Wavelength	Stage	Tap Ratio	Pigtail Style	Fiber Length	In/Out Connector
	59=1550/980nm 69=1585/980nm	S=Single Stage U=Dual Stage	1=1% 2=2% 5=5%	1=Bare Fiber 2=900um Jacket	1=1.0m 2=1.5m	0=None 1=FC/APC 2=FC/PC 3=SC/APC 4=SC/PC 5=ST 6=LC



Dimensions





**Hybrid & Components For EDFA** 

