

# HYBRID

Isolator-WDM Hybrid

WDM-Isolator Hybrid

1550nm Tap-Isolator Hybrid

Tap/Isolator/WDM Hybrid

# ISOLATOR – WDM HYBRID

## Features

- Low insertion loss, high isolation
- High stability and reliability
- Optical path epoxy free
- Broad operating wavelength range

## Applications

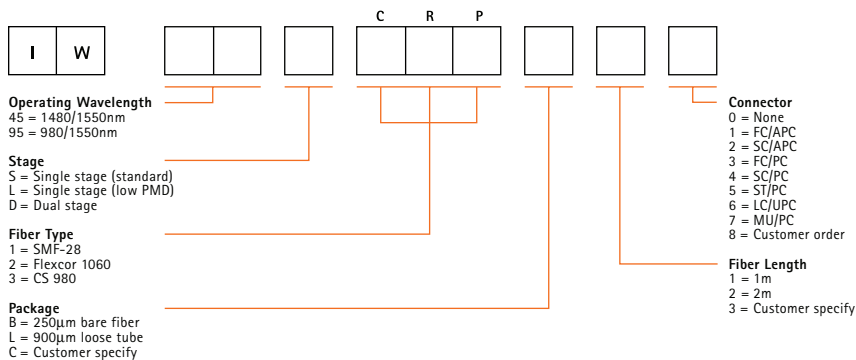
- EDFA module
- Fiber optic test equipment

## Specifications

Stage	Single ( standard )	Single ( low PMD )	Dual
Signal wavelength ( nm )		1550 ± 15	1550 ± 30
Pump wavelength ( nm )			980 ± 25; 1480 ± 20
Signal channel insertion loss ( dB )		<= 0.7	<= 1.0
Pump channel insertion loss ( dB )		<= 0.6	<= 0.6
Signal channel isolation ( dB )		>= 31	>= 45
Polarization mode dispersion ( PMD ) ( ps )	<= 0.25	<= 0.05	<= 0.05
Directivity ( dB ) ( all ports )			>= 60
Return loss ( dB ) ( all ports )			>= 55
Insertion loss temperature sensitivity ( dB / °C )		< 0.005	
Polarization dependence loss ( PDL ) ( dB )		<= 0.1	
Max. operating power ( mW )		<= 300	
Max. tensile load ( N )		5	
Operating temperature range ( °C )		0 ~ 65	
Storage temperature range ( °C )		-40 ~ +85	
Fiber type	Corning SMF-28 ( for 1480/1550 ), Flexcor, or CS 980 ( for 980/1550 )		
Package dimensions ( mm )	B: ( D ) 5.5 x ( L ) 32; L: ( D ) 5.5 x ( L ) 36		

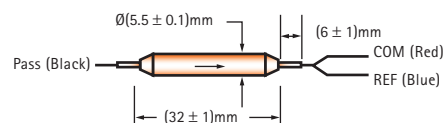
All specifications referenced are without connectors.

## Ordering Information

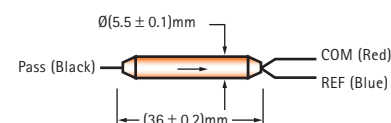


## Dimensions

B: 250µm bare fiber



L: 900µm loose tube



# WDM – ISOLATOR HYBRID

## Features

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- Optical path epoxy free
- Broad operating wavelength range

## Applications

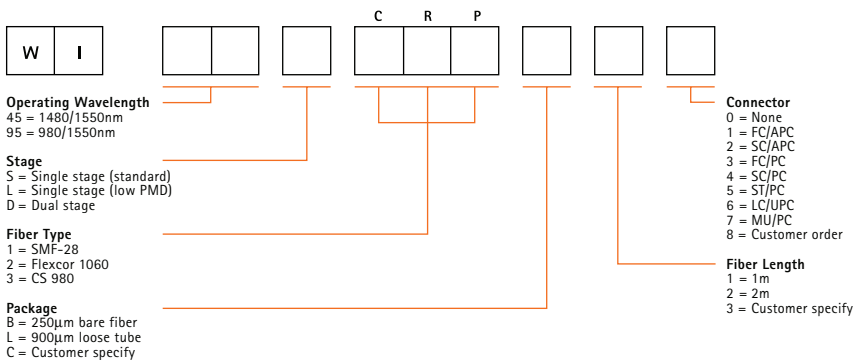
- EDFA module
- Fiber optic test equipment

## Specifications

Stage	Single ( standard )	Single ( low PMD )	Dual
Signal wavelength ( nm )	1550 ± 15		1550 ± 30
Pump wavelength ( nm )		980 ± 25; 1480 ± 20	
Signal channel insertion loss ( dB )	<= 0.7		<= 1.0
Pump channel insertion loss ( dB )	<= 0.6		<= 0.6
Signal channel isolation ( dB )	>= 31		>= 45
Polarization mode dispersion ( PMD ) ( ps )	<= 0.25	<= 0.05	<= 0.05
Directivity ( dB ) ( all ports )			>= 60
Return loss ( dB ) ( all ports )			>= 55
Insertion loss temperature sensitivity ( dB / °C )		< 0.005	
Polarization dependence loss ( PDL ) ( dB )		<= 0.1	
Max. operating power ( mW )		<= 300	
Max. tensile load ( N )		5	
Operating temperature range ( °C )		0 ~ 65	
Storage temperature range ( °C )		-40 ~ +85	
Fiber type	Corning SMF-28 ( for 1480/1550 ), Flexcor, or CS 980 ( for 980/1550 )		
Package dimensions ( mm )	B: ( D ) 5.5 x ( L ) 32; L: ( D ) 5.5 x ( L ) 36		

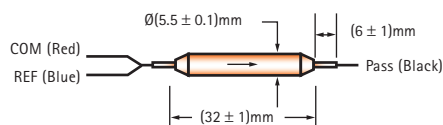
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## Ordering Information

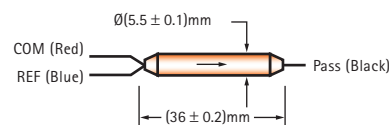


## Dimensions

B: 250µm bare fiber



L: 900µm loose tube



# 1550NM TAP-ISOLATOR HYBRID

## Features

- Low insertion loss, high isolation
- High stability and reliability
- Optical path epoxy free
- Broad operating wavelength range

## Applications

- EDFA module
- Fiber optic test equipment

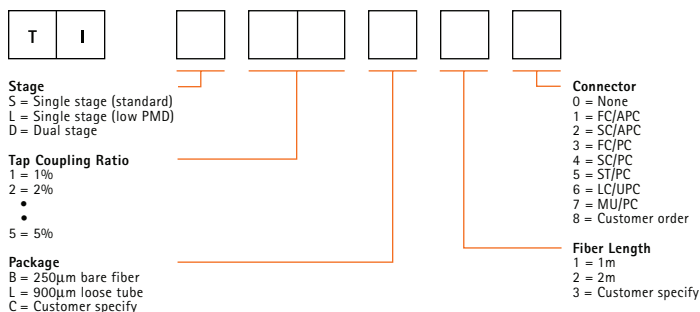


## Specifications

Stage	Single ( standard )	Single ( low PMD )	Dual
Signal wavelength ( nm )	1550 ± 15		1550 ± 30
Signal channel insertion loss ( dB )	<= 0.6		<= 1.0
Tap insertion loss range ( dB )		14 ( 5% ) ~ 20.8 ( 1% )	
Signal channel isolation ( dB )	>= 31		>= 45
Polarization mode dispersion ( PMD ) ( ps )	<= 0.25	<= 0.05	<= 0.05
Directivity ( dB ) ( all ports )		>= 60	
Return loss ( dB ) ( all ports )		>= 55	
Insertion loss temperature sensitivity ( dB / °C )		< 0.005	
Polarization dependence loss ( PDL ) ( dB )		<= 0.1	
Max. operating power ( mW )		<= 300	
Max. tensile load ( N )		5	
Operating temperature range ( °C )		0 ~ 65	
Storage temperature range ( °C )		-40 ~ +85	
Fiber type		Corning SMF-28	
Package dimensions ( mm )		B: ( D ) 5.5 x ( L ) 32; L: ( D ) 5.5 x ( L ) 36	

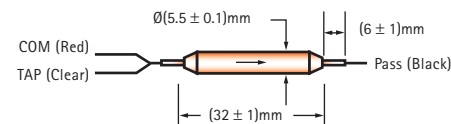
All specifications referenced are without connectors.

## Ordering Information

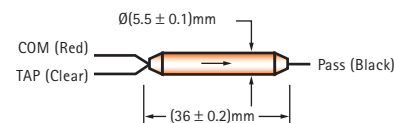


## Dimensions

B: 250µm bare fiber



L: 900µm loose tube



Note: The other wavelength specifications are also available upon request.

# TAP/ISOLATOR/WDM HYBRID

## Features

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- Optical path epoxy free
- Broad operating wavelength range

## Applications

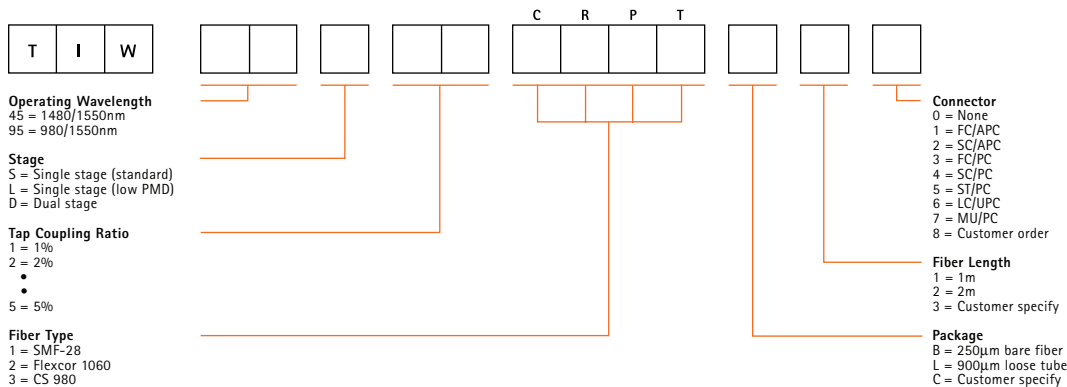
- EDFA module
- Fiber optic test equipment

## Specifications

Stage	Single ( standard )	Single ( low PMD )	Dual
Signal wavelength ( nm )	1550 ± 15		1550 ± 30
Pump wavelength ( nm )	980 ± 25; 1480 ± 20		
Signal channel insertion loss ( dB )	≤ 1.2 ( for 14/15 ); ≤ 1.5 ( for 98/15 )		≤ 1.5
Pump channel insertion loss ( dB )	≤ 0.6		≤ 0.6
Tap insertion loss range ( dB )	14 ( 5% ) ~ 20.8 ( 1% )		
Signal channel isolation ( dB )	≥ 31		≥ 45
Polarization mode dispersion ( PMD ) ( ps )	≤ 0.25	≤ 0.05	≤ 0.05
Directivity ( dB ) ( all ports )	≥ 60		
Return loss ( dB ) ( all ports )	≥ 55		
Insertion loss temperature sensitivity ( dB / °C )	< 0.005		
Polarization dependence loss ( PDL ) ( dB )	≤ 0.1		
Max. operating power ( mW )	≤ 300		
Max. tensile load ( N )	5		
Operating temperature range ( °C )	0 ~ 65		
Storage temperature range ( °C )	-40 ~ +85		
Fiber type	Corning SMF-28 ( for 1480/1550 ), Flexcor, or CS 980 ( for 980/1550 )		
Package dimensions ( mm )	B: ( D ) 5.5 x ( L ) 32; L: ( D ) 5.5 x ( L ) 36		

All specifications referenced are without connectors.

## Ordering Information



## Dimensions

B: 250μm bare fiber

L: 900μm loose tube

