



Key Features

- Low Loss
- High Isolation
- Low Polarization Sensitivity
- Excellent Stability

Applications

- Fiber Optic Amplifier
- CATV and Laser Industry
- Long Haul Network



Circulator/ Isolator/ Hybrid

Hybrid (WDM+Isolator)

Parameter Specifications

Parameters	Single Stage	Dual Stage	Units
Signal Wavelength Range (λ_s)	1528 – 1565		nm
Pump Wavelength Range (λ_p)	965 – 995 or 1470-1490		nm
Insertion Loss at λ_s	≤ 1.2	≤ 1.3	dB
Isolation at λ_s (-5~70°C)	≥ 21	≥ 36	dB
Transmission Isolation at λ_p	≥ 30	≥ 30	dB
Reflection Isolation of at λ_s	≥ 15	≥ 15	dB
Insertion Loss at λ_p	≤ 0.6	≤ 0.8	dB
Polarization Dependent Loss	≤ 0.1	≤ 0.15	dB
Polarization Mode Dispersion	≤ 0.25	≤ 0.05	ps
Return Loss	≥ 50	≥ 50	dB
Directivity	≥ 55	≥ 55	dB
Fiber Type	See scheme for choice		
Dimension	Bare Fiber 900um Loose tube	$\phi 5.5 \times 35$ $\phi 5.5 \times 40$	mm

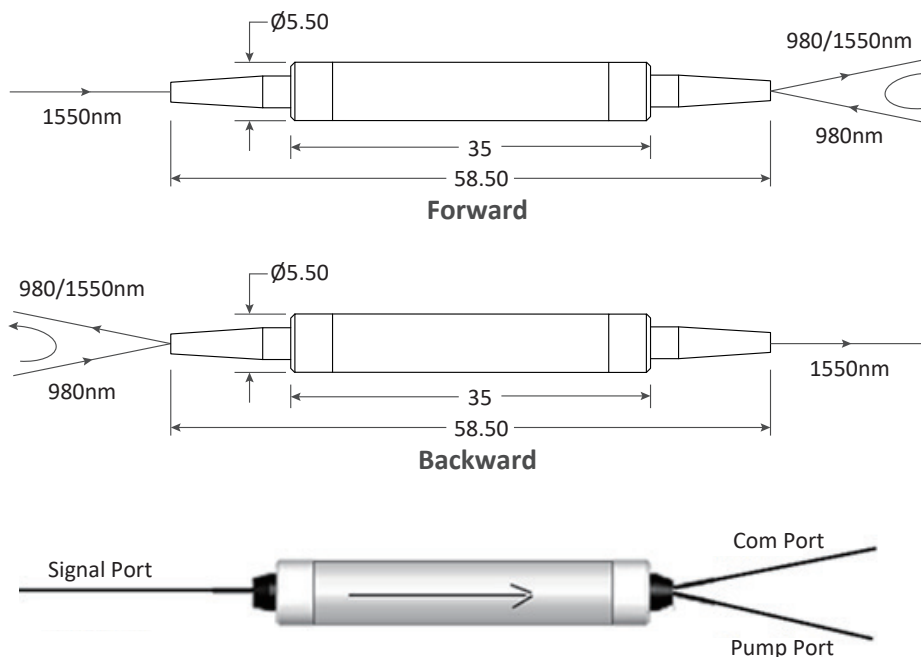
Notes:

- The above parameters do not include connector, each pair connector adds 0.2dB.

Operating Conditions

Parameters	Performance Specifications	Units
Maximum Power handling	500	mW
Operating Temperature	-5 ~ +70	°C
Storage Temperature	-40 ~ +85	°C
Operation Humidity	5 to 95 % Relative Humidity	

Mechanical Dimensions



Unit: mm

Part Number Scheme: Hybrid (WDM+Isolator)



Wavelength
 9815 = 980/1550nm
 4815 = 1480/1550nm

Stage
 S = Single
 D = Dual

Pump Type
 F = Forward
 B = Backward

Tap Option
 0 = no tap
 1 = 1%
 2 = 2%
 5 = 5%

Jacket Type
 A = 250um
 B = 900um

Fiber Length
 10 = 1.0 m
 15 = 1.5 m
 30 = 3.0 m
 mn = m.n meters

Fiber Type (pump/common)
 1 = SMF-28e*/SMF-28e*
 2 = Hi1060/SMF-28e*
 3 = Hi1060/Dual-Cladding
 4 = MM980/Dual-Cladding

Connector Type

0 = None	M = MTP 12P
2 = FC/UPC	N = MTP 24P
3 = FC/APC	O = MPO 12P
4 = SC/UPC	P = MPO 24P
5 = SC/APC	H = MU/UPC
6 = ST/UPC	X = Customized
7 = LC/UPC	
8 = LC/APC	