acphotonics

RoHS COMPLIANT

WDM / Isolator Hybrid Combination (980/1550 & 1480/1550 nm)

ACP's 980/1550 and 1480/1550 WDM/Isolator Hybrid component utilizes thin film coating technology and proprietary designed metal bonding micro optics packaging to achieve optical signal and pump power combining and back reflection signal elimination. It provides , low insertion loss, high isolation, wide pass band, low temperature sensitivity and epoxy free optical path. It can be used for EDFA application.

FEATURES

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

APPLICATION

- Fiberoptic Amplifiers
- CATV Fiberoptic Links
- WDM Systems
- Fiberoptic Instruments
- Transmitters and Fiber Lasers

PERFORMANCE SPECIFICATIONS

Parameter	Specifications			
Operating Wavelength	980/1550 nm		1480/1550 nm	
Stage	Single	Dual	Single	Dual
Signal Wavelength	1550 ± 15nm	1550 ± 30nm	1550 ± 15nm	1550 ± 30nm
Pump Wavelength	965 ~ 1000nm	965 ~ 1000nm	1450 ~ 1490nm	1450 ~ 1490nm
Isolation @ 23°C, all SOP	≥ 31dB	≥ 45dB	≥ 31dB	≥ 45dB
Wavelength Isolation	≥ 12[1)]dB	≥ 12[1)]dB	≥ 15[1)]dB	≥ 15[1)]dB
Wavelength Isolation	≥ 30[2)]dB	≥ 30[2)]dB	≥ 25[2)]dB	≥ 25[2)]dB
Insertion Loss (Signal)	≤ 1.1[3)]dB	≤ 1.2[3)]dB	≤ 0.8 [3)]dB	≤ 1.0 [3)]dB
Insertion Loss (Pump)	≤ 0.6[3)]dB	≤ 0.6[3)]dB	≤ 0.6 [3)]dB	≤ 0.6 [3)]dB
Temperature Dependent Loss	≤ 0.25dB	≤ 0.3dB	≤ 0.25dB	≤0.3dB
Wavelength Dependent Loss	≤ 0.4dB	≤ 0.4dB	≤ 0.4dB	≤ 0.4dB
Polarization dependent loss	≤ 0.1dB	≤ 0.2dB	≤ 0.1dB	≤ 0.1dB
Polarization Mode dispersion	≤ 0.25 (0.05)[4)]ps	≤ 0.05ps	≤ 0.25 (0.05)[4)]ps	≤ 0.05ps
Directivity	≥ 55dB			
Return Loss	≥ 55dB			
Optical Power	≤ 300mW			
Operating Temperature	0 to +70°C			
Storage Temperature	- 40 to +85°C			
Fiber Type (Pump and Common port)	Hi1060 or Hi 1060 Flex		SMF-28, SMF28 Ultra, or ClearCurve ZBL	
Fiber Type (Signal port)	SMF-28, SMF28 Ultra, or ClearCurve ZBL			
Package Dimensions	A= Standard, Φ5.5xL38mm (250um bare fiber), Φ5.5xL42mm (900um jacket fiber)			

Note: 1) 1 to 3 @ signal (See "Port Configuration").
2) 1 to 2 or 2 to 1 @ pump (See "Port Configuration").
3) Overall wavelength range under 0 to 70°C, all SOP.
4) Low PMD option.

All values referenced are without connector.

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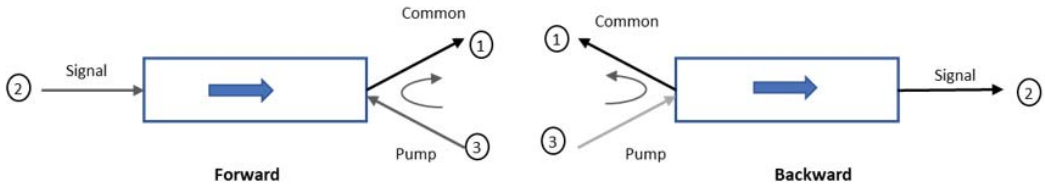
MECHANICAL DIMENSIONS

A package:

PORT CONFIGURATIONS



ORDERING INFORMATION

WDIH	Stage	Operating Wavelength	Port	Package	Fiber Type* (Pump and Common port)	Fiber Type* (Signal port)	Pigtail Style	Fiber Length**	In Connector	Out Connector
	S=Single D=Dual	9855=980/1550nm 4855=1480/1550nm	F=Forward B=Backward	A=A package	2=SMF-28 Ultra (G.657.A1) 3=ClearCurve ZBL(G.657.B3) 6=Hi1060 7=Hi1060 Flex	2=SMF-28 Ultra (G.657.A1) 3=ClearCurve ZBL(G.657.B3)	1=Bare fiber 2=900um loose tube	05=0.5m 10=1.0m · · · 20=2.0m	0=None 1=FC/APC 2=FC/PC 3=SC/APC 4=SC/PC 5=ST 6=LC/UPC 7=LC/APC	0=None 1=FC/APC 2=FC/PC 3=SC/APC 4=SC/PC 5=ST 6=LC/UPC 7=LC/APC

*1=SMF-28(G.652) is available upon request.

**Other length is available upon request, However, 900μm loose tube is only up to 2m.