PBC Series

Polarization beam combiner(PBC) can combine two lights of different polarization status into one fiber. Polarization beam combiner and isolator hybrid(iPBC) can combine two lights of different polarization status into one fiber, and can prevent unwanted back-reflect light from degrading the reliability and stability of pump laser.

IPBC depolarizer hybrid provides the function of a polarization beam combining with isolation hybrid (iPBC) and depolarizer (iPBCD) which can transform the polarized light into the unpolarized light.

The products are Telcordia GR-1221-CORE qualified.

Features

- Stable and reliable
- Epoxy-free optical path

Applications

- Raman amplifier
- High optical power EDFA

Specifications

Parameter	Unit	Value					
		PBC		IPBC		IPBCD	
		P Grade	A Grade	P Grade	A Grade	P Grade	A Grade
Center wavelength (λc)	nm	1450 and other					
Opretating wavelength range	nm	λc±30					
Insertion loss(Over wavelength and temperature)	dB	≤0.6	≤0.8	≤0.6	≤0.8	≤0.7	≤0.9
Peak isolation(λc,23℃)	dB			≥30		≥30	
Min. isolation(Over wavelength and temperature)	dB			≥20		≥20	
Directivity(Port1→Port2)	dB	≥50		≥50		≥50	
Extinction ratio	dB	≥20	≥18				
Return loss	dB	≥50		≥50		≥50	
Degree of polarization						<10%	
Input polarization direction		Slow axis					
Operation power	mW	≤1000					
Input fiber (Port1、2) Type	dB	Φ0.4mm Polarization Maintaining Fiber					
Output fiber (Port3)Type	dB	Φ0.4mm PM Fiber, Φ0.25mm SMF-28e(for IPBCD)					
Operation temperature	℃	0~+70					
Storage temperature	℃	-40~+85					
Package	mm	Φ5.5×33		Φ5.5×33		Φ5.5×66	

Nate:All insertion loss referenced without connector.

Ordering information

PBC/IPBC/IPBCD — ☐ — ☐ — ☐ — ☐

145:1450nm customer specify	P:Grade P A:Grade A	1:1m customer specify	00:no connector FC,SC,LC,MU/PC, UPC,APC
Wavelength	Grade	Fiber length	Connector