2 × 2 Polarization Beam Combiner/Splitter (DPBC/DPBS Series)

Rev 11B

Description

The Dual Polarization Beam Combiner/Splitter, 2 × 2 PBC/PBS, is a compact high performance lightwave component that combines or divides two orthogonal polarization signals into one or two output fibers. The most common applications are in polarization mode dispersion compensator, EDFA, Raman Amplifier, coherent telecommunication systems and fiber sensor. The Dual Polarization Beam Combiner/Splitter is characterized with high extinction ratio and low insertion loss.

Key Features

- High Power Handling
- Low Insertion Loss

Applications

- EDFA
- Raman Amplifier

Specifications

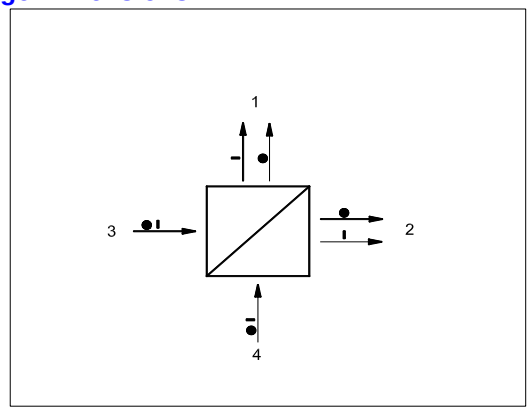
Parameter	Unit	Value	
Grade	-	Grade P	Grade A
Center Wavelength (λc)	nm	1550	
Operating Wavelength Range	nm	λc ± 20	
Typ. Insertion loss (Port 3 to Port 1 & 2, at slow axis, Port 4 to Port 1 & 2, at fast axis)	dB	0.6	0.8
Max. Insertion Loss (Port 3 to Port 1 & 2, at slow axis, Port 4 to Port 1 & 2, at fast axis)	dB	0.8	1.0
Min. Extinction Ratio (for Splitter Only)	dB	20	18
Min. Return Loss	dB	50	
Max. Optical Power (Continuous Wave)	W	5	
Max. Peak Power for ns Pulse	kW	10	
Fiber Type	-	PM1550 Panda Fiber for Port 1 & 2, SMF-28 or PM1550 Panda Fiber for Port 3 & 4	
Max. Tensile Load	N	5	
Operating Temperature	℃	- 5 to + 70	
Storage Temperature	℃	- 40 to + 85	

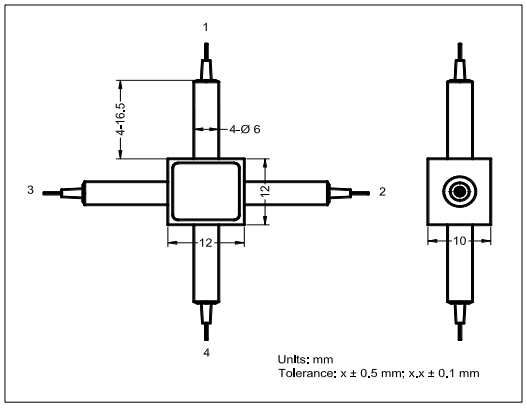
[1]IL is 0.3 dB higher, RL is 5 dB lower, and ER is 2 dB lower for each connector added. Connector key is aligned to slow axis.

[2]Maximum optical power handling will be 1 W only for connector added.

[3]All of above value are tested at room temperature @ 23 ℃, unless other specified.

Package Dimensions





Ordering Information

DPBC-①①-②-③-④-⑤-⑥-⑦ **DPBS**-①①-②-③-④-⑤-⑥-⑦

①①: Wavelength	③: Connector Type	④: Fiber Type	⑤: Fiber Type for Port 3 & 4
31 - 1310 nm	1 - FC/UPC	B - 250 μm Panda Fiber	1 - SMF-28 (Standard)
48 - 1480 nm	2 - FC/APC	L - 900 μm Loose Tube	2 - Slow Axis Aligned 45° to Port 1
55 - 1550 nm	3 - SC/UPC	S - Specify	3 - Slow Axis Aligned to Port 1
SS - Specify	4 - SC/APC		S - Specify
	N - None		

②: Grade	⑥: Fiber Length	⑦: Power Type
P - Premium	Q - 0.75 m	P - Pulsed
A - A Grade	S - Specify	C - Continuous Wave