

# Polarization Beam Combiner/Splitter

(patent pending)

## Product Description

Agiltron's PB Series Polarization Beam Combiner/Splitter is used to combine two polarized light signals or split one light signal into two polarized outputs with their polarization states orthogonal to each other. Employing Agiltron's proven advanced micro-optic design, it features low insertion loss, epoxy-free optical path, high extinction ratio, compact package, high reliability, and high stability. These quality components have excellent characteristics, making them an ideal choice for application in fiber amplifier systems, pump lasers, and optical fiber sensors.



## Performance Specifications

PB Series Polarization beam Combiner/Splitter		Specifications	Unit
Operating Wavelength		1310±40 1420±40 1480±40 1550±40	nm
Insertion Loss <sup>1</sup>	Typical	0.4	dB
	Maximum	0.6	
Extinction Ratio <sup>1</sup> (ER)	Typical	22	dB
	Minimum	18	
Wavelength Dependent Loss		< 0.15	dB
Directivity (2→3 or 3→2)		> 50	dB
Return Loss <sup>1</sup>		> 50	dB
Polarization Alignment		Slow Axis	
Optical Power Handling		< 1000	mW
Operating Temperature Range		0 ~ 70	°C
Storage Temperature		-40 ~ 85	°C
Fiber Type		Port 1: SMF-28 or Panda PM fiber Ports 2 and 3: Panda PM fiber	
Package Dimension		Φ5.5x 35.0(L)	mm

<sup>1</sup> Excluding connectors

## Features

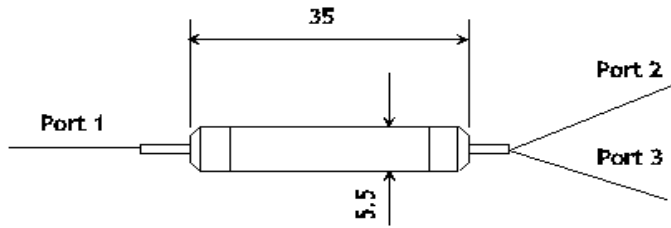
- Low Insertion Loss
- Epoxy -Free Optical Path
- High Extinction Ratio
- Compact Package
- High Reliability & Stability
- Cost Effective

## Applications

- Optical Fiber Amplifier
- Fiber Optic Sensor
- Instrumentation

# Polarization Beam Combiner/Splitter

## Mechanical Dimensions (mm)



## Ordering Information

PBCS-	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Type	Wavelength	Grade	Package Type	Port 1 Fiber Type	Ports 2&3 Fiber Type	Fiber Jacket	Fiber Length	Connector	
Regular=1 Special=0	1310=3 1480=4 1550=5 Special=0		Regular=1 Special=0	SMF-28 250um=1 Panda 250um =2 Panda 400um =4 Panda RC80um=8 Special=0	Panda 250um =2 Panda 400um =4 Panda RC80um=8 Special=0	Bare fiber=1 900um loose tube=3	0.25m=1 0.5m=2 1.0 m=3 Special=0	None=1 FC/PC=2 FC/APC=3 SC/PC=4 SC/APC=5 ST/PC=6 LC=7 Special=0	