



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

● 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. It is characterized with high extinction ratio and low insertion loss.

● Key Features

- High Power Handling
- Low Insertion Loss

● Applications

EDFA

Raman Amplifier

● Specifications

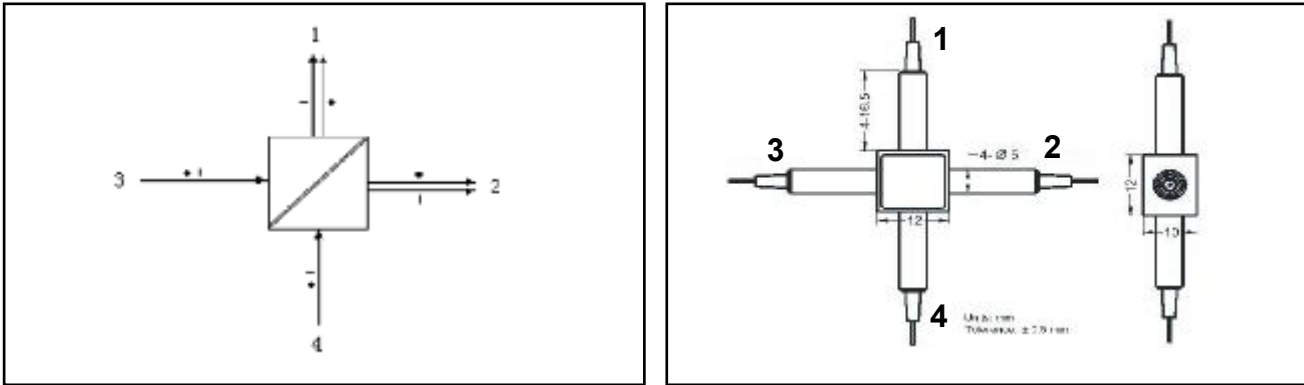
Parameter	Unit	Value
Grade	-	Grade P Grade A
Center Wavelength (λ_c)	nm	1550
Operating Wavelength Range	nm	$\lambda_c \pm 20$
Typ. Insertion loss (Port 3 to Port 1 & 2, at slow axis, Port 4 to Port 1 & 2, at fast axis)	dB	0.6 0.8
Max. Insertion Loss (Port 3 to Port 1 & 2 at slow axis, Port 4 to Port 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	-	PM1550Panda fiber for Port 1&2, SMF-28or PM1550Panda fiber for Port 3& 4
Max. Tensile Load	N	5
Operating Temperature	℃	-5 to+70
Storage Temperature	℃	-40 to+85

¹IL 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.

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

³All of above value are tested at room temperature @ 23 °C , unless other specified.

● Package Dimensions



● Ordering Information

GK-DPBC-①-②-③-④-⑤-⑥-⑦

GK-DPBS-①-②-③-④-⑤-⑥-⑦

①: Wavelength

- 31 - 1310nm
- 48 - 1480nm
- 55 - 1550nm
- SS - Specify

②: Fiber Type for Port 3& 4

- 1 - SMF-28 (Standard)
- 2 - Slowaxisaligned45° toPort 1
- 3 - Slowaxisaligned toPort 1
- S - Specify

③: Connector Type

- 1 - FC/UPC 4 - SC/APC
- 2 - FC/APC N - None
- 3 - SC/UPC

④: Fiber Jacket

- B - 250 μm Bare Fiber
- L - 900 μm Loose Tube
- S - Specify

⑤: Fiber Length

- Q - 0.75 m
- S - Specify

⑥: Grade

- P - Premium
- A - Agrade

⑦: Power Type

- P - PulseApplication
- C - ContinuousWave