



Singlemode Broadband Coupler (SBC Series)

Rev 11

Description

The Singlemode Broadband Coupler offers very low insertion loss, low polarization dependent loss and excellent environmental stability. This coupler series offers accurate coupling ratios from 1/99 to 50/50 and is available with very good uniformity in a wide wavelength range. These components find extensive applications to perform power splitting and monitoring functions in all kinds of optical communication systems.

Key Features

- Low Polarization Dependent Loss
- Low Insertion Loss
- Excellent Environmental Stability

Applications

- Optical Communication Systems
- Fiber Sensing

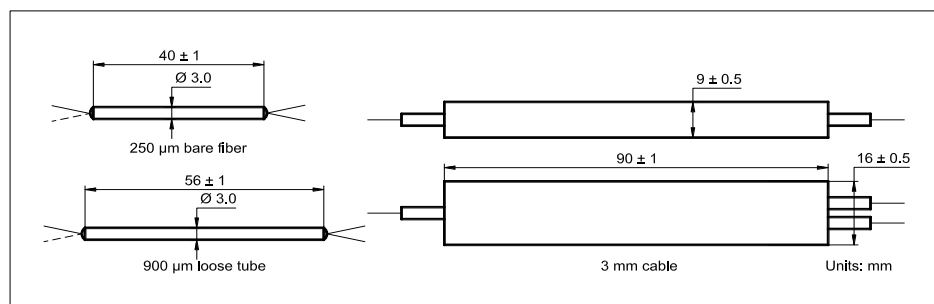
Specifications

Parameter	Unit	Value				
Center Wavelength (λ_c)	nm	1310 or 1550 or Specify				
Operating Wavelength	nm	$\lambda_c \pm 40$				
Coupling Ratio	%	01/99	02/98	03/97	05/95	10/90
Max. Insertion Loss ¹	dB	21.5/0.2	18.5/0.25	17.5/0.3	14.6/0.4	10.8/0.65
Coupling Ratio	%	20/80	30/70	40/60	50/50	
Max. Insertion Loss ¹	dB	7.5/1.2	5.6/1.8	4.4/2.5	3.4/3.4	
Max. Polarization Dependent Loss	dB	0.10				
Thermal Stability	dB/°C	≤ 0.002 over - 5 to + 70 °C				
Min. Return Loss ²	dB	50				
Min. Directivity	1 × 2	55				
	2 × 2	60				
Max. Optical Power (Continuous Wave)	mW	300				
Fiber Type	-	SMF-28 Fiber				
Operating Temperature	°C	- 5 to + 70				
Storage Temperature	°C	- 40 to + 85				

¹IL is 0.3 dB higher for each connector added.

²RL is 5 dB lower for connector added.

Package Dimensions



Ordering Information

SBC-①-②②-③③-④-⑤-⑥

①: Configuration

1 - 1 × 2

2 - 2 × 2

②②: Wavelength

31 - 1310 nm

55 - 1550 nm

SS - Specify

③③: Coupling Ratio

01 - 01/99

02 - 02/98

03 - 03/97

05 - 05/95

10 - 10/90

20 - 20/80

30 - 30/70

40 - 40/60

50 - 50/50

SS - Specify

④: Connector Type

1 - FC/UPC

2 - FC/APC

3 - SC/UPC

4 - SC/APC

N - None

S - Specify

⑤: Fiber Jacket

B - 250 μm Bare Fiber

L - 900 μm Loose Tube

3 - 3 mm Cable

S - Specify

⑥: Fiber Length

1 - 1.0 m

S - Specify