

Singlemode Broadband Coupler (SBC Series)

Rev 11

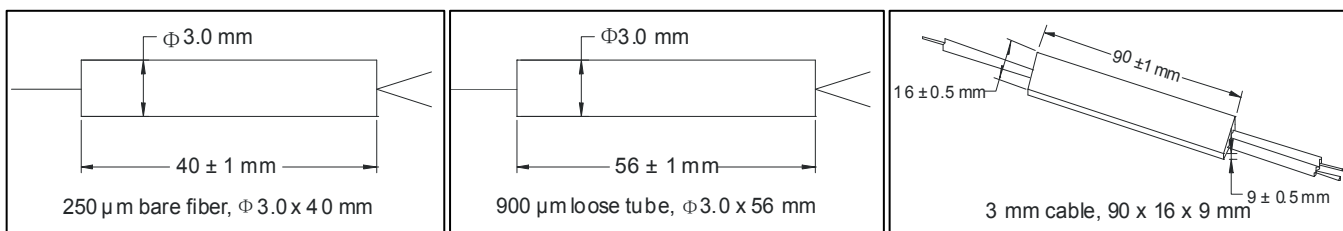
The Singlemode Broadband Coupler offers very low insertion loss, low polarization dependence and excellent environmental stability. Accurate coupling ratio from 50/50 to 1/99 are available with very good uniformity in a wide wavelength range. These components find extensive applications to perform power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

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	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	dB	7.5/1.2	5.6/1.8	4.4/2.5	3.4/3.4	
Max. PDL (Tap/Through Port)	dB	0.10				
Thermal Stability	dB/°C	≤ 0.002 over -5°C to $+70^\circ\text{C}$				
Min. Return Loss	dB	50				
Min. Directivity	1 × 2	55				
	2 × 2	60				
Max. Optical Power (Continuous Wave)	mW	300				
Fiber Type		SMF-28 fiber				
Package Dimensions	mm	250 μm bare fiber, $\Phi 3.0 \times 40$ mm				
	mm	900 μm loose tube, $\Phi 3.0 \times 56$ mm				
	mm	3 mm cable, $90 \times 16 \times 9$ mm				
Operating Temperature	°C	-5 to +70				
Storage Temperature	°C	-40 to +85				

*IL is 0.3 dB higher, RL is 5 dB lower for each connector added.

Package Dimensions



Ordering Information

SBC-①-②②-③③-④-⑤-⑥

①: Configuration	②②: Wavelength	③③: Coupling Ratio	④: Connector Type
1 - 1 × 2	31 - 1310 nm	01 - 01/99 20 - 20/80	1 - FC/UPC
2 - 2 × 2	55 - 1550 nm	02 - 02/98 30 - 30/70	2 - FC/APC
	SS - Specify	03 - 03/97 40 - 40/60	3 - SC/UPC
		05 - 05/95 50 - 50/50	4 - SC/APC
		10 - 10/90 SS - Specify	N - None
⑤: Fiber Jacket	⑥: Fiber Length		S - Specify
B - 250 μm bare fiber	1 - 1.0 m		
L - 900 μm loose tube	S - Specify		
C - 3 mm cable			
S - Specify			