

Singlemode Standard Coupler (SMC Series)

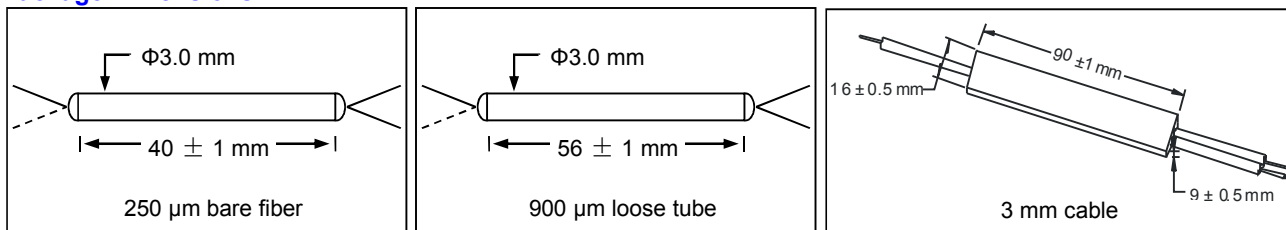
The SMC Singlemode Standard Couplers offer very low insertion loss, low polarization dependence and excellent environmental stability. Accurate coupling ratio from 50/50 to 1/99 are available with very good uniformity in a wide wavelength range of both 1310 nm and 1550 nm windows. These components find extensively 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	$\lambda_c \pm 20$							
Coupling Ratio	%	01/99	02/98	03/97	05/95	10/90	15/85	20/80	
Max. Insertion Loss	dB	21.4/0.2	18.5/0.25	17.4/0.3	14.5/0.4	10.8/0.65	8.8/0.95	7.5/1.2	
Coupling Ratio	%	25/75	30/70	35/65	40/60	45/55	50/50		
Max. Insertion Loss	dB	6.5/1.55	5.6/1.8	5/2.25	4.4/2.5	3.85/2.98	3.4		
Max. PDL (Tap/Through Port)	dB	0.10							
Max. Excess Loss	dB	0.10							
Thermal Stability	dB/°C	≤ 0.002 over -5°C to $+70^\circ\text{C}$							
Min. Return Loss	dB	50							
Directivity	dB	55							
	1 × 2								
	2 × 2	60							
Max. Optical Power (CW)	mW	300							
Fiber Type		SMF-28 fiber							
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

SMC-①②③④⑤⑥

①: Configuration	②②: Wavelength	③③: Coupling Ratio			④: Connector Type
1 - 1 × 2	31 - 1310 nm	01 - 01/99	15 - 15/85	40 - 40/60	1 - FC/UPC
2 - 2 × 2	55 - 1550 nm	02 - 02/98	20 - 20/80	45 - 45/55	2 - FC/APC
	SS - Specify	03 - 03/97	25 - 25/75	50 - 50/50	3 - SC/UPC
		05 - 05/95	30 - 30/70		4 - SC/APC
		10 - 10/90	35 - 35/65		N - None
					S - Specify

⑤: Fiber Type ⑥: Fiber Length

B - 250 μm bare fiber

1 - 1 m

L - 900 μm loose tube

S - Specify

3 - 3 mm cable

S - Specify