

Introduction



Rayzer's **Single Mode Filter Coupler (SMFC)** series, 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.



Specification

Parameter	Unit	Values
Configuration	-	1X2 or 2X2
Center Wavelength	nm	1550
Operating Wavelength Range	nm	±20
Max.PDL	dB	0.1
Typ. Excess Loss	dB	0.3
Max. Excess Loss	dB	0.6
Min. Return Loss	dB	50
Handing Power	mW	2000
Max. Tensile Load	N	5
Fiber Type	-	SMF28e
Working Temperature	°C	-5 to +75°C
Storage Temperature	°C	-40 to +85°C
Coupling Ratio and Tolerance		
Coupling Ratio	%	1/99 2/98 5/95 10/90 20/80 30/70 40/60 50/50
Tolerance	%	±0.3 ±0.5 ±0.7 ±1.0 ±2.0 ±2.0 ±2.5 ±3.0

*IL 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.

*Above specifications are for device without connector and may change without notice.

Ordering Information

SMFC-①-②-③-④-⑤-⑥-⑦-⑧

① Center Wavelength	② Configuration	③ Coupling Ratio	④ Package Dimension	⑤ Fiber Type	⑥ Fiber Length	⑦ Fiber Jacket	⑧ Connector Type
1064-1064nm	1×2-1×2	1/99-1/99	3.0x35	Hi980	1-1M	0-Bare Fiber	FU-FC/PC
1550-1550nm	2×2-2×2	10/90-10/90	2.5X20	Hi1060-Hi1060	S-Specify	1-900µm Loose Tube	FA-FC/APC
2000-2000nm		50/50-50/50	2.4x30	SMF28e-SMF28e		2-2mm Cable	S-specify
S-Specify		S-Specify		S-Specify			