



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	633	780	830	980	1064	1310	1550	2000
Operating Wavelength Range	nm	±3	±10	±10	±15	±15	±20	±20	±20
Max.PDL	dB	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.2
Typ. Excess Loss	dB	0.8	0.5	0.5	0.4	0.4	0.4	0.3	0.5
Max. Excess Loss	dB	1.2	0.8	0.8	0.6	0.6	0.6	0.5	0.7
Min. Return Loss	dB	50							
Handing Power	mW	100	200	200	300	500	2000	2000	4000
Max. Tensile Load	N	5							
Fiber Type	-	630HP	780HP	780HP	Hi980	Hi1060	SMF28e	SMF28e	SM1950
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

①Center Wavelength	②Configuration	③Coupling Ratio	④Package Dimension	⑤Fiber Type	⑥Fiber Length	⑦Fiber Jacket	⑧Connector 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			