

## Coupler Modules

### SM Broadband Fiber Coupler

#### OBC-2



### Product Description

Single mode broadband fiber couplers are used to split light with minimal loss from one into two fibers or to combine light from two fibers into one fiber. Rotal offers both single-window and dualwindow broadband couplers. They are designed and manufactured to meet the Bellcore GR-1209-CORE requirements.

### Features

- ▶ Wide Bandwidth
- ▶ Low Excess Loss
- ▶ Excellent Performance
- ▶ High Stability and Reliability

### Applications

- ▶ Telecommunications
- ▶ CATV Network
- ▶ Access Network
- ▶ Optical Amplifier

### Product Specifications

Parameter	Unit	Value		
Operating wavelength	nm	C or L	1310±40	1310±40 & 1550±40
Split ratio		1/99~50/50	1/99~50/50	1/99~50/50
Fiber type		SMF-28e		
Return loss	dB	>50		
Directivity	dB	>55		
PDL	dB	<0.10	<0.10	<0.15
TDL	dB	<0.1		
Operation temperature	°C	-10~+70		
Storage temperature	°C	-40~+85		

Insertion Loss						
C or L			1310 ±40		1310 ±40 & 1550 ±40	
Split Ratio	Tap	Signal	Tap	Signal	Tap	Signal
1/99	19.0~21.0	≤0.20	18.2~21.0	≤0.20	18.0~22.0	≤0.25
3/97	14.6~16.2	≤0.30	14.4~16.4	≤0.30	14.0~16.6	≤0.35
5/95	12.4~13.8	≤0.35	12.2~14.0	≤0.35	11.8~14.5	≤0.45
10/90	9.60~10.8	≤0.60	9.40~11.0	≤0.60	9.60~11.3	≤0.60
20/80	6.60~7.60	≤1.15	6.30~7.80	≤1.15	6.50~7.80	≤1.20
30/70	5.00~5.50	≤1.75	4.60~5.75	≤1.75	4.70~6.50	≤1.90
40/60	3.95~4.30	≤2.50	3.85~4.40	≤2.50	3.60~4.70	≤2.70
50/50	2.80~3.30		2.70~3.40		2.80~3.30	

Note: All insertion loss referenced without connector loss, PDL and TDL.

### Package and Installation Dimension

Package(mm)	A		B		C1		C2		D		E		LGX		Rack
	φ3 x 52 <sup>1</sup>	φ3.5 x 65 <sup>2</sup>	100 x 18 x 9.2	90 x 16 x 9	112 x 80 x 10.6	130 x 90 x 15	1SL	2SL	19"						
Installation(mm)			65 x 12 x 4φ x 2.4	50 x 9 x 2φ 3.2	102 x 72 x 4φ 3.2	124 x 84 x 4φ 3.5							431 x 235 x 44		
Box material	SST Tube	SST Tube	Plastics	Metal	Plastics	Metal							Metal		
													Metal		
													N≤4 (Adapter)		N≤8 (Adapter)
													N≤32 (Adapter)		

Note: 1, Type A is only for 0.25mm fiber. 2, Type B is for 0.9mm fiber.

### Ordering Information

OBC-2	□	□	□	□	□	□	□
12:1 x 2 22:2 x 2	131:1310nm 155:1550nm 135:1310 & 1550nm 159:L Band	01: 1:99 02: 2:98 50: 50:50	00:adapter (only for package E) 025: φ0.25mm 09: φ0.9mm 30: φ3mm	00:adapter (only for package E) 1:1.0m customer specify	00:no connector FC/PC,FC/APC, SC/PC,SC/APC, LC/PC,MU/PC, customer specify	Selected from the dimension tableA,B,.....	
Port	Wavelength	Couple ratio	Fiber Dia.	Fiber length	Connector	Package	