

## Coupler Modules

### SM Broadband Tree Fiber Coupler

### OBTC-N



### Product Description

Rotal's Single Mode Broadband Tree Fiber Coupler (1 x N, 2 x N series, N ≥ 3) can operate in single-window or dual-window, and are featured with high stable and reliable performances. The products meet the Telcordia GR-1221-CORE requirements.

### Features

- ▶ Wide Bandwidth and Low Insertion
- ▶ Low Insertion Loss
- ▶ High Quality and Reliability

### Applications

- ▶ Fiber Distribution Network
- ▶ LAN
- ▶ CATV Network
- ▶ Test Equipment

### Product Specifications

| Parameter             | Unit | Value                  |                        |                        |                        |                          |                          |                          |                          |
|-----------------------|------|------------------------|------------------------|------------------------|------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
|                       |      | Single window          |                        |                        |                        | Dual- window             |                          |                          |                          |
| Operating wavelength  | nm   | 1310 ±40/1550 ±40      |                        |                        |                        |                          |                          |                          |                          |
| Port(1 N)             |      | N=3                    | N=4                    | N=5                    | N=6                    | N=8                      | N=16                     | N=24                     | N=32                     |
| Fiber type            |      | SMF-28e                |                        |                        |                        |                          |                          |                          |                          |
| Insertion loss        | dB   | 5.4' /5.6 <sup>2</sup> | 7.0' /7.2 <sup>2</sup> | 8.0' /8.2 <sup>2</sup> | 9.2' /9.5 <sup>2</sup> | 10.4' /10.7 <sup>2</sup> | 14.4' /14.8 <sup>2</sup> | 15.3' /15.7 <sup>2</sup> | 17.4' /17.8 <sup>2</sup> |
| Uniformity            | dB   | 0.5' /0.6 <sup>2</sup> | 0.7' /0.8 <sup>2</sup> | 1.1' /1.2 <sup>2</sup> | 1.3' /1.5 <sup>2</sup> | 1.5' /1.7 <sup>2</sup>   | 1.7' /2.0 <sup>2</sup>   | 2.0' /2.3 <sup>2</sup>   | 2.2' /2.5 <sup>2</sup>   |
| Return loss           | dB   | >55                    |                        |                        |                        |                          |                          |                          |                          |
| Directivity           | dB   | >55                    |                        |                        |                        |                          |                          |                          |                          |
| PDL                   | dB   | <0.20                  | <0.20                  | <0.30                  | <0.30                  | <0.30                    | <0.40                    | <0.50                    | <0.50                    |
| TDL                   | dB   | <0.20                  | <0.20                  | <0.25                  | <0.25                  | <0.30                    | <0.40                    | <0.45                    | <0.50                    |
| Operation temperature | °C   | -10~+70                |                        |                        |                        |                          |                          |                          |                          |
| Storage temperature   | °C   | -40~+85                |                        |                        |                        |                          |                          |                          |                          |

Note: 1,Single Window 2,Dual-Window 3,All insertion loss referenced without connector loss, PDL and TDL.

### Package and Installation Dimension

|                  | D                | E                 | F               | G                 | LGX                  | J                  | M                 | Rack           |
|------------------|------------------|-------------------|-----------------|-------------------|----------------------|--------------------|-------------------|----------------|
| Package(mm)      | 112 x 80 x 10.5  | 130 x 90 x 15     | 100 x 80 x 10   | 140 x 102 x 15    | 1SL 2SL              | 133.5 x 96 x 18    | 150 x 110 x 19    | 19"            |
| Installation(mm) | 102 x 72 x 4φ3.2 | 124 x 84 x 4φ 3.5 | 94 x 74 x 4φ3.5 | 128 x 92 x 4φ 3.2 |                      | 128.5 x 90 x 4 x 3 | 145 x 105 x 4φ3.5 | 431 x 235 x 44 |
| Box material     | Plastics         | Metal             | Metal           | Plastics          | Metal                | Metal              | Metal             | Metal          |
|                  | N=2;3;4          | N=3;4(Adapter)    | N=2;3;4         | N≤12              | N≤4 N≤8<br>(Adapter) | N≤16               | N≤32              | N≤ 32(Adapter) |

### Ordering Information

|  |   |  |   |  |  |   |   |
|--|---|--|---|--|--|---|---|
| OBTC-N   | □   | □  | □   | □  | □  | □ | □ |
|  | ↓   | ↓  | ↓   | ↓  | ↓  | ↓ | ↓ |
| 14:1 x 4<br>18:1 x 8<br>116:1 x 16<br>132:1 x 32<br>232:2 x 32 | Single-Windpw<br>131:1310nm<br>155:1550nm<br>Dual-Window<br>135:1310 & 1550nm | 00:adapte<br>(not for package E)<br>025: φ0.25mm<br>09: φ0.9mm<br>30: φ3mm | 00:adapter<br>(not for package E)<br>1:1.0m | 00:no connector<br>FC,SC,LC,MU/PC,UPC,APC<br>00:no connector<br>FC,SC,LC,MU/PC,UPC,APC | Selected from the dimension table D E..... |   |   |
| Port   | Wavelength  | Fiber Dia.   | Fiber length                                | Connector  | Package                                    |   |   |