

# Standard and Mini C-Band Singlemode Fused Coupler

CORNING

## Features and Benefits

Tap Ratios Available

Rugged Construction

Low Input Polarization Sensitivity

Available in Both 1x2 and 2x2 Configurations

The 811 Series of Standard and Mini C-Band Singlemode Fused Coupler offers superior performance and long term reliability. These components are highly stable across the stated range, exhibiting low insertion loss, and high directivity over all split ratios. They are available in both 1x2 and 2x2 port configurations.

## Standards

RoHS	Free of hazardous substances according to RoHS2011/65/EU
Design and Test Criteria	Product is compliant with Telcordia GR-1209-CORE and GR-1221-CORE

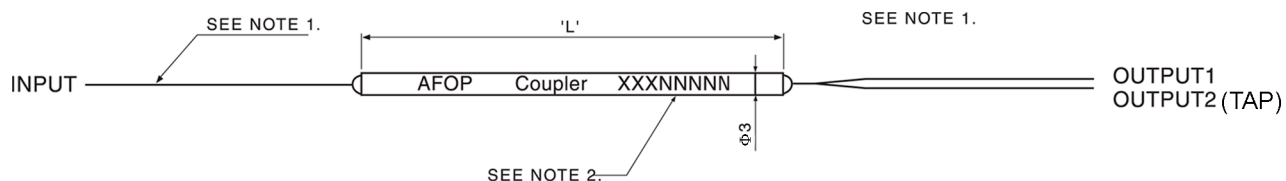


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## Specifications

Parameters	Specifications
Bandpass Width	1528-1563 nm
Directivity	< -55 dB
Return Loss	< -55 dB
PMD	< 0.1 ps
Pigtail Tensile Strength	5N
Operating Temperature	-40°C to +75°C
Storage Temperature	-40°C to +85°C
Storage Relative Humidity	20-90 (%RH)



### Notes:

1. Fiber length is 1 meter  $\pm$  10 cm
2. "XXXXXXXXXX" is the production serial number

Packaging Dimensions	Standard Size	Mini Size	Submini Size
Fiber Type	250 $\mu$ m, 900 $\mu$ m	250 $\mu$ m, 900 $\mu$ m	250 $\mu$ m, 900 $\mu$ m
Tube Length (L)	55 mm, 60 mm	45 mm, 50 mm	35 mm, 40 mm

Color Code			
Input	Clear, White	Clear, White	Clear, White
Output 1 (Thru)	Black, Black	Black, Black	Black, Black
Output 2 (Tap)	Clear, White	Clear, White	Clear, White

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## Maximum Insertion Loss Conversion Table (dB) (Excluding Connector Loss)

Split Ratio		IL* (Max) dB		PDL* (Max) dB		WDL* (Max) dB		TDL** (Max) dB		P/N Reference
99/1	Premium	0.18	21.50	0.05	0.20	0.05	0.35	0.02	0.20	811-NN01-2CXN0
	Ultra	0.15	21.00	0.03	0.15	0.03	0.25			811-NN01-3CXN0
98/2	Premium	0.20	18.50	0.05	0.15	0.05	0.30	0.02	0.15	811-NN02-2CXN0
	Ultra	0.20	18.00	0.03	0.10	0.03	0.22			811-NN02-3CXN0
95/5	Premium	0.40	14.40	0.05	0.15	0.05	0.20	0.08	0.15	811-NN05-2CXN0
	Ultra	0.35	13.50	0.03	0.10	0.03	0.15			811-NN05-3CXN0
90/10	Premium	0.70	10.90	0.06	0.15	0.06	0.15	0.08	0.15	811-NN10-2CXN0
	Ultra	0.60	10.50	0.04	0.10	0.04	0.10			811-NN10-3CXN0
80/20	Premium	1.20	7.50	0.07	0.10	0.10	0.15	0.10	0.10	811-NN20-2CXN0
	Ultra	1.15	7.30	0.05	0.08	0.08	0.12			811-NN20-3CXN0
70/30	Premium	1.80	5.60	0.08	0.10	0.15	0.15	0.10	0.10	811-NN30-2CXN0
	Ultra	1.70	5.50	0.06	0.08	0.10	0.10			811-NN30-3CXN0
60/40	Premium	2.50	4.40	0.08	0.08	0.15	0.15	0.10	0.10	811-NN40-2CXN0
	Ultra	2.40	4.30	0.07	0.08	0.10	0.10			811-NN40-3CXN0
50/50	Premium	3.40	3.40	0.08	0.08	0.15	0.15	0.10	0.10	811-NN50-2CXN0
	Ultra	3.20	3.20	0.08	0.08	0.10	0.10			811-NN50-3CXN0

### Notes:

\* IL (Insertion Loss), PDL (Polarization Dependent Loss), and WDL (Wavelength Dependent Loss) all measured at 23°C without connectors

\*\* TDL (Temperature Dependent Loss) is measured as change in IL from -5°C to +75°C.

Maximum insertion loss is measured over operating wavelength range (not including PDL and TDL).

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## Ordering Information

Standard and Mini C and L Band Singlemode Fused Coupler

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**1** **2** **3** **4** **5** **6**

### 1 Select Packaging Type

- 1: 250  $\mu$ m Tube
- 2: 900  $\mu$ m Tube
- 3: 900  $\mu$ m Ruggedized
- 4: 1.6 mm Ruggedized
- 5: 3 mm Ruggedized

### 2 Select Configuration

- 1: 1x2
- 2: 2x2

### 3 Select Ratio

- 01: 1%
- 05: 5%
- ...
- 50: 50%

### 4 Select Grade

- 2: Premium
- 3: Ultra

### 5 Select Connector\*

- 0: None
- K: LC/APC
- L: LC/PC
- P: FC/PC
- Q: FC/APC
- S: SC/PC
- T: SC/APC
- U: MU/PC

### 6 Select Tube Size\*\*

- 0: Standard
- 1: Mini
- 2: Submini

## Notes:

\* Specifications do not include connector loss

\*\* Use 0 for Ruggedized Packaging

**These part numbers are specific to Corning Optical Communications OEM Solutions Business Unit. Contact OEM sales at +1-408-736-6900 or [oemsales@corning.com](mailto:oemsales@corning.com) and visit [www.corning.com/opcomm/oem](http://www.corning.com/opcomm/oem) for sales support.**



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