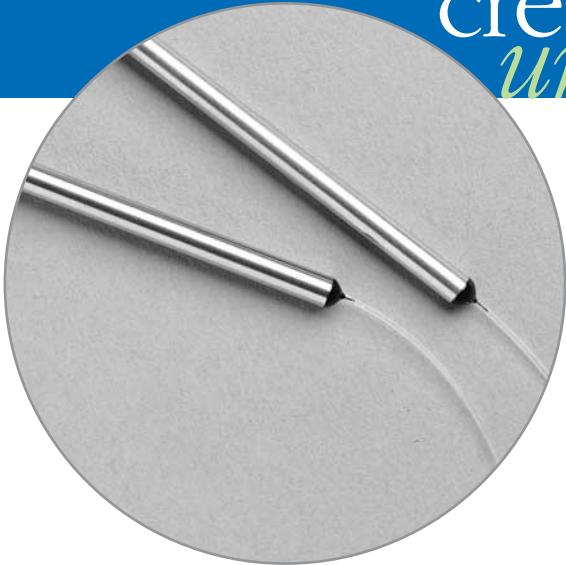


creating  
*unique advantages*  
together



## WaveEssentials™ Broadband Single Window Couplers

### Product Capabilities and Value

At WaveSplitter, we understand the need for high-quality single-mode couplers. Our patented WaveProcessor™ Interleaver products require fused couplers with good uniformity and low excess loss over a very wide wavelength range. And now the same couplers that we use in our products are also available in our WaveEssentials product line.

In order to meet the growing market needs, we've designed our manufacturing capability to allow high volume production while maintaining good performance and repeatability. This translates into quick delivery at good value, whether you need 100 or 10,000 units. Our broadband couplers offer a bandwidth of 80nm in either the 1310 or 1550nm window, wide enough for just about any application. Standard coupling ratios from 1:99 to 50:50 are also available in either a 1x2 or 2x2 design. In addition, WaveSplitter can package the couplers in standard LGX boxes or other custom packaging designs.

### Features

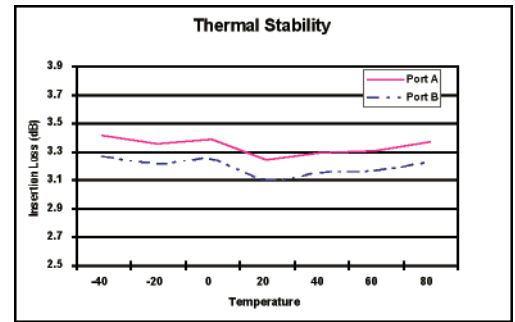
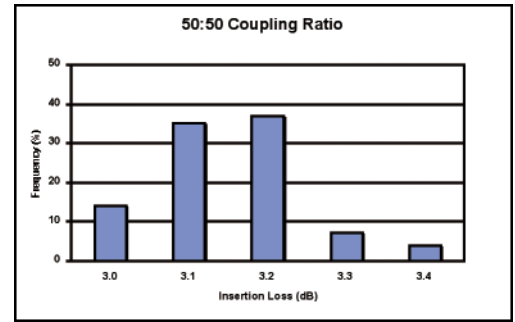
- Wide bandwidth
- Low insertion loss and PDL
- Low excess loss
- High uniformity
- Telcordia™ reliability

### Benefits

- High volume production
- Quick delivery
- Value-added packaging capability

## Specifications (50:50 coupling ratio)

Parameter	Premium	A Grade	B Grade
Operating Wavelength (nm)	1310 or 1550		
Insertion Loss (dB)	≤ 3.4	≤ 3.7	≤ 4.6
Typical Excess Loss (dB)	0.1	0.3	0.5
Uniformity (dB)	≤ 0.6	≤ 1.0	≤ 1.5
Polarization Dependent Loss (dB)	≤ 0.10	≤ 0.15	≤ 0.20
Directivity (dB)	≤ -50		
Thermal Stability (dB)	≤ 0.25		
Operating Temperature (°C)	-40 to 85		
Storage Temperature (°C)	-50 to 85		
Package Dimensions (D x L) (mm)	S: 3.0 x 54 L: 3.0 x 62		

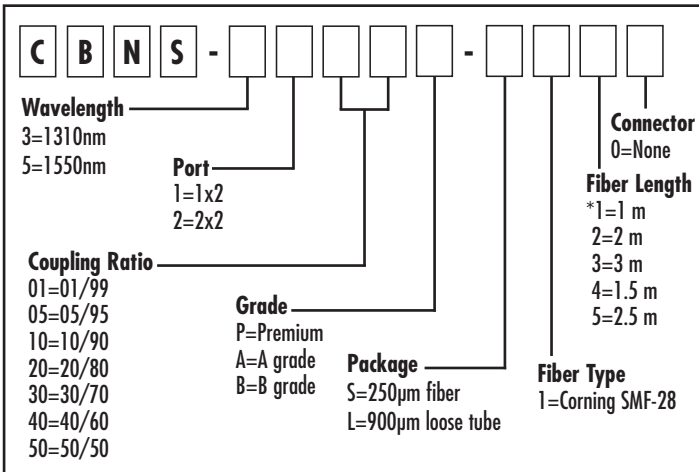
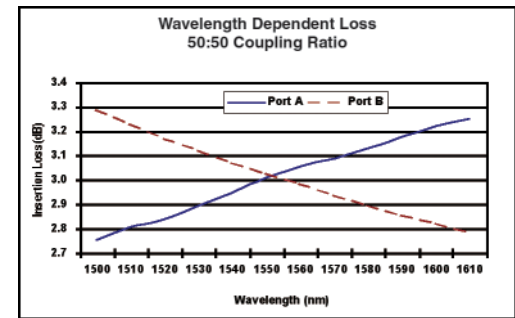


## Coupling Ratio/Insertion Loss Conversion Chart

Coupling Ratio	Premium	A Grade	B Grade
50/50	3.4	3.7	4.3
40/60	4.4/2.5	4.8/2.8	5.3/3.1
30/70	5.6/1.8	6.1/2.0	6.8/2.3
20/80	7.4/1.1	8.0/1.3	8.7/1.5
10/90	10.8/0.6	12.0/0.8	13.3/1.0
5/95	14.6/0.4	18.4/0.5	20.0/0.8
1/99	21.5/0.2	22.0/0.3	23.0/0.6

## Coupling Ratio/PDL Conversion Chart

Coupling Ratio	Premium	A Grade	B Grade
40-50%	0.10	0.15	0.20
30-39%	0.15	0.15	0.15
10-29%	0.25	0.25	0.25
1-9%	0.30	0.30	0.35



\* Standard product

For more information on any WaveSplitter product contact your sales representative listed on our web site [www.wavesplitter.com](http://www.wavesplitter.com). Or contact WaveSplitter Technologies, Inc. directly at 510.580.8888.



WaveSplitter Technologies, Inc. • 46430 Fremont Blvd., Fremont, CA 94538 • Tel 510.580.8888 Fax 510.580.1395