

深圳市科健网络新技术有限公司

Shenzhen Kejian Cable Network New Technology Co., Ltd.

光产品规格书

Fiber Products Specification

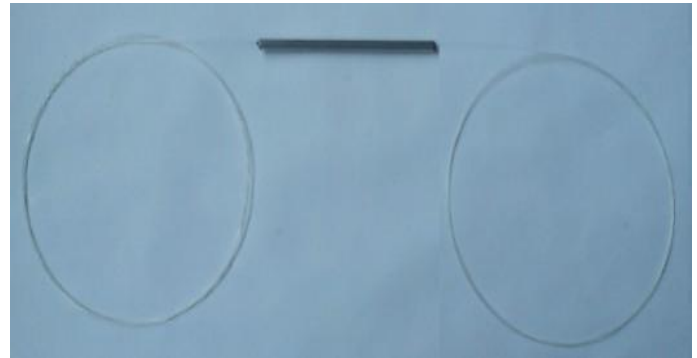
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1X2 (2X2) Single Mode Single Window Narrow Band Coupler

Features:

- Low PDL
- Low Insertion Loss
- High Directivity
- Stable and Reliable



Applications:

- Fiber Communication System
- Optical Testing System
- CATV、FTTH

Specification				
Port Configuration		1X2 or 2X2		Unit
Operating Wavelength		1310,1490,1550		nm
Bandwidth		1310/1550±20,1490±10		nm
Insertion loss		Typ.	A Grade	
Coupler Ratio	50:50	≤3.2	≤3.4	dB
	40:60	≤4.40/2.50	≤4.60/2.70	
	30:70	≤5.65/1.80	≤6.0/2.0	
	20:80	≤7.50/1.20	≤7.70/1.40	
	10:90	≤10.80/0.70	≤11.50/0.80	
	5:95	≤14.60/0.40	≤15.70/0.50	
	1:99	≤20.5/0.30	≤21.7/0.40	
PDL		≤0.10	≤0.15	dB
Operating Temperature		-40 ~ +85		°C
Storage Temperature		-40 ~ +85		°C
Package Dimensions		250um Bare fiber	Φ3.0X56	mm
		900um Loose tube	Φ3.0X56	mm
		2mm、3mm Loose tube	90X20X10	mm

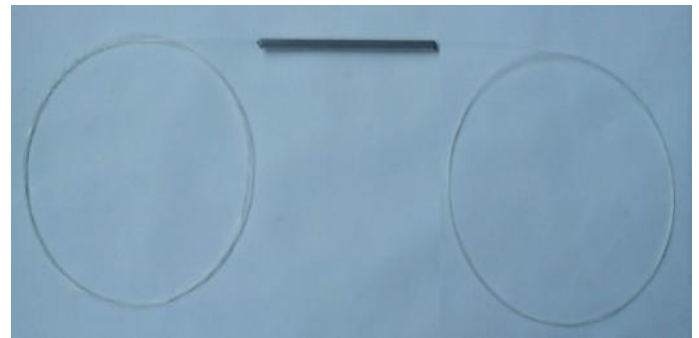
Note:

1. Insertion Loss is measured within whole operating band, not include PDL.
2. Values are referenced without connectors.
3. Other package dimension and coupler performance can meet customer design.
4. Operating temperature is -20~+75 °C for 0.9mm、 2mm、 3mm cable package.

1X2 (2X2) Single Mode Single Window Wideband Coupler

Features:

- Low PDL
- Low Insertion Loss
- High Directivity
- Stable and Reliable



Applications:

- Fiber Communication System
- Optical Testing System
- CATV、FTTH

Specification				
Port Configuration		1X2 or 2X2		Unit
Operating Wavelength		1310,1550		nm
Bandwidth		1310±40,1550±40		nm
Insertion loss		Typ.	A Grade	
Coupler Ratio	50:50	≤3.2	≤3.4	dB
	40:60	≤4.40/2.50	≤4.60/2.70	
	30:70	≤5.65/1.80	≤6.0/2.0	
	20:80	≤7.50/1.20	≤7.70/1.40	
	10:90	≤10.80/0.70	≤11.50/0.80	
	5:95	≤14.60/0.40	≤15.70/0.50	
	1:99	≤20.5/0.30	≤21.7/0.40	
PDL		≤0.10	≤0.15	dB
Operating Temperature		-40 ~ +85		°C
Storage Temperature		-40 ~ +85		°C
Package Dimensions		250um Bare fiber	Φ3.0X56	mm
		900um Loose tube	Φ3.0X56	mm
		2mm、3mm Loose tube	90X20X10	mm

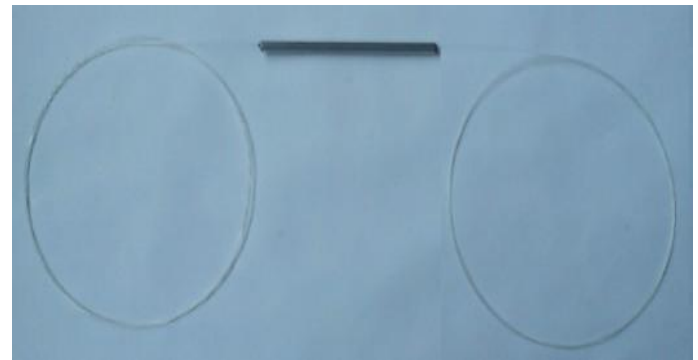
Note:

1. Insertion Loss is measured within whole operating band, not include PDL.
2. Values are referenced without connectors.
3. Other package dimension and coupler performance can meet customer design.
4. Operating temperature is -20~+75 °C for 0.9mm、 2mm、 3mm cable package.

1X2 (2X2) Single Mode Dual Window Wideband Coupler

Features:

- Low PDL
- Low Insertion Loss
- High Directivity
- Stable and Reliable



Applications:

- Fiber Communication System
- Optical Testing System
- CATV、FTTH

Specification				
Port Configuration		1X2 or 2X2		Unit
Operating Wavelength		1310/1550		nm
Bandwidth		1310/1550±40		nm
Insertion loss		Typ.	A Grade	
Coupler Ratio	50:50	≤3.2	≤3.4	dB
	40:60	≤4.40/2.50	≤4.60/2.70	
	30:70	≤5.65/1.80	≤6.0/2.0	
	20:80	≤7.50/1.20	≤7.70/1.40	
	10:90	≤10.80/0.70	≤11.50/0.80	
	5:95	≤14.60/0.40	≤15.70/0.50	
	1:99	≤20.5/0.30	≤21.7/0.40	
PDL		≤0.15	≤0.20	dB
Operating Temperature		-40 ~ +85		℃
Storage Temperature		-40 ~ +85		℃
Package Dimensions		250um Bare fiber	Φ3.0X56	mm
		900um Loose tube	Φ3.0X56	mm
		2mm、3mm Loose tube	90X20X10	mm

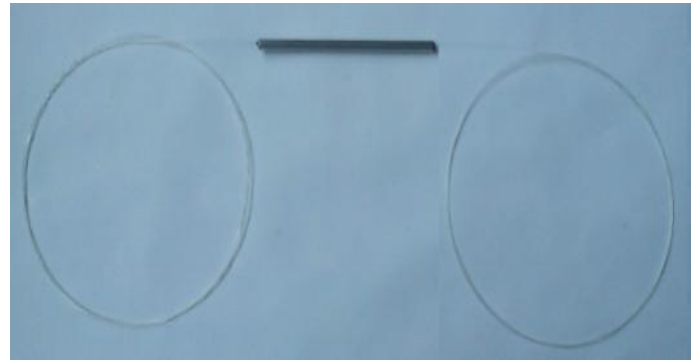
Note:

1. Insertion Loss is measured within whole operating band, not include PDL.
2. Values are referenced without connectors.
3. Other package dimension and optical performance can meet customer design.
4. Operating temperature is -20~+75℃ for 0.9mm、 2mm、 3mm cable package.

1X2 (2X2) Single Mode Triple Window Wideband Coupler

Features:

- Low PDL
- Low Insertion Loss
- High Directivity
- Stable and Reliable



Applications:

- Fiber Communication System
- Optical Testing System
- CATV、FTTH

Specification				
Port Configuration		1X2 or 2X2		Unit
Operating Wavelength		1310/1490/1550		nm
Bandwidth		1310/1550±40/1490±10		nm
Insertion loss		Typ.	A Grade	
Coupler Ratio	50:50	≤3.2	≤3.4	dB
	40:60	≤4.40/2.50	≤4.60/2.70	
	30:70	≤5.65/1.80	≤6.0/2.0	
	20:80	≤7.50/1.20	≤7.70/1.40	
	10:90	≤10.80/0.70	≤11.50/0.80	
	5:95	≤14.60/0.40	≤15.70/0.50	
	1:99	≤20.5/0.30	≤21.7/0.40	
PDL		≤0.15	≤0.20	dB
Operating Temperature		-40 ~ +85		°C
Storage Temperature		-40 ~ +85		°C
Package Dimensions		250um Bare fiber	Φ3.0X56	mm
		900um Loose tube	Φ3.0X56	mm
		2mm、3mm Loose tube	90X20X10	mm

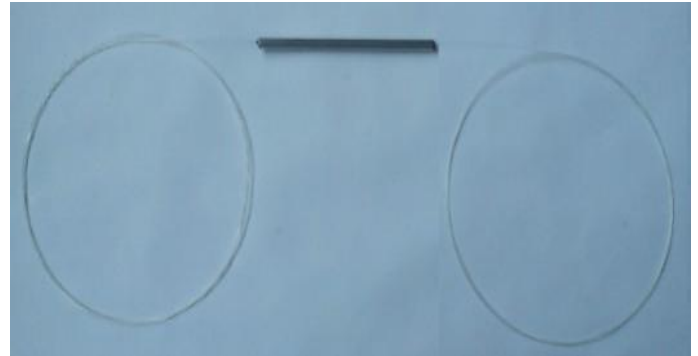
Note:

1. Insertion Loss is measured within whole operating band, not include PDL.
2. Values are referenced without connectors.
3. Other package dimension and optical performance can meet customer design.
4. Operating temperature is -20~+75 °C for 0.9mm、2mm、3mm cable package.

1X2 (2X2) Single Mode 1310/1550nm WDM Coupler

Features:

Low PDL
 Low Insertion Loss
 High Isolation
 High Return Loss
 Stable and Reliable



Applications:

Fiber Communication System

Fiber Testing System

CATV、FTTH

WDM networks, Optical fiber sensors

Specification			
Port Configuration	1X2 or 2X2		Unit
Operating Wavelength	1310/1550		nm
Bandwidth	±15		nm
Insertion loss	Typ.	A Grade	dB
	≤0.25	≤0.3	
PDL	≤0.10	≤0.15	dB
Isolation	≥18	≥16	dB
Return Loss	≥55		dB
Directivity	≥55		dB
Operating Temperature	-40 ~ +85		°C
Storage Temperature	-40 ~ +85		°C
Package Dimensions	250um Bare fiber	Φ3.0X56	mm
	900um Loose tube	Φ3.0X56	mm
	2mm、3mm Loose tube	90X20X10	mm

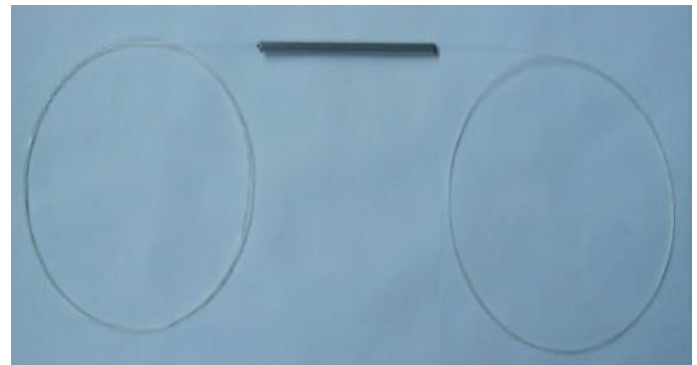
Note:

1. Insertion Loss is measured within whole operating band, not include PDL.
2. Values are referenced without connectors.
3. Other package dimension and optical performance can meet customer design.
4. Operating temperature is -20~+75 °C for 0.9mm、2mm、3mm cable package.

1X3 Single Mode Single Window Narrow Band Coupler

Features:

- Low PDL
- Low Insertion Loss
- High Directivity
- Stable and Reliable



Applications:

- Fiber Communication System
- Optical Testing System
- CATV、FTTH

Specification			
Port Configuration	1X3		Unit
Operating Wavelength	1310,1490,1550		nm
Bandwidth	1310±20,1490±10,1550±20		nm
Coupler Ratio	33.3:33.3:33.3		%
Insertion loss	Typ.	A Grade	dB
	≤5.8	≤6.0	
PDL	≤0.20	≤0.25	dB
Return Loss	≥55		dB
Operating Temperature	-40 ~ +85		℃
Storage Temperature	-40 ~ +85		℃
Package Dimensions	250um Bare fiber	Φ3.0X56	mm
	900um Loose tube	Φ4.0X65	mm
	2mm、3mm Loose tube	100X80X10	mm

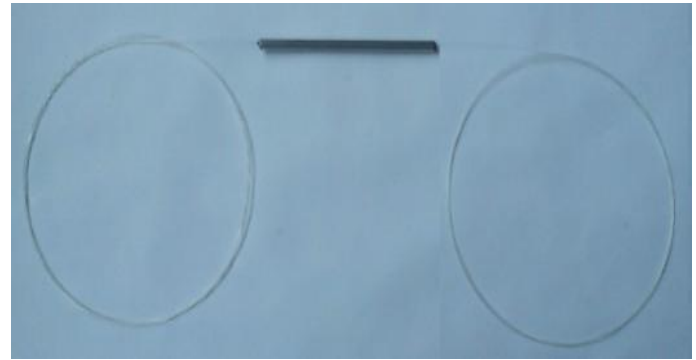
Note:

1. Insertion Loss is measured within whole operating band, not include PDL.
2. Values are referenced without connectors.
3. Other package dimension and optical performance can meet customer design.
4. Operating temperature is -20~+75℃ for 0.9mm、2mm、3mm cable package.

1X3 Single Mode Single Window Wideband Coupler

Features:

- Low PDL
- Low Insertion Loss
- High Directivity
- Stable and Reliable



Applications:

- Fiber Communication System
- Optical Testing System
- CATV、FTTH

Specification

Specification			
Port Configuration	1X3		Unit
Operating Wavelength	1310,1550		nm
Bandwidth	1310±40,1550±40		nm
Coupler Ratio	33.3:33.3:33.3		%
Insertion loss	Typ.	A Grade	dB
	≤5.8	≤6.0	
PDL	≤0.20	≤0.25	dB
Return Loss	≥55		dB
Operating Temperature	-40 ~ +85		°C
Storage Temperature	-40 ~ +85		°C
Package Dimensions	250um Bare fiber	Φ3.0X56	mm
	900um Loose tube	Φ4.0X65	mm
	2mm、3mm Loose tube	100X80X10	mm

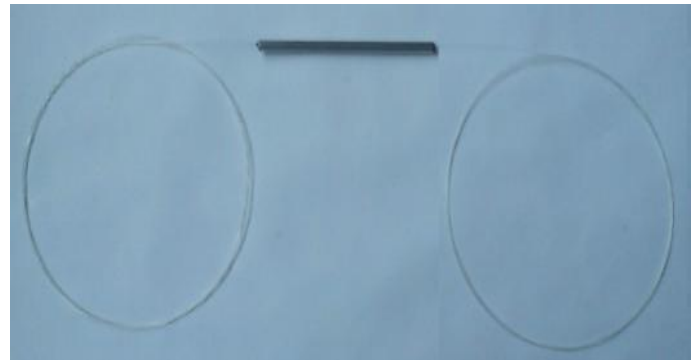
Note:

1. Insertion Loss is measured within whole operating band, not include PDL.
2. Values are referenced without connectors.
3. Other package dimension and optical performance can meet customer design.
4. Operating temperature is -20~+75 °C for 0.9mm、2mm、3mm cable package.

1X3 Single Mode Dual Window Wideband Coupler

Features:

- Low PDL
- Low Insertion Loss
- High Directivity
- Stable and Reliable



Applications:

- Fiber Communication System
- Optical Testing System
- CATV、FTTH

Specification			
Port Configuration	1X3		Unit
Operating Wavelength	1310±1550		nm
Bandwidth	1310±40±1550±40		nm
Coupler Ratio	33.3:33.3:33.3		%
Insertion loss	Typ.	A Grade	dB
	≤5.8	≤6.0	
PDL	≤0.20	≤0.25	dB
Return Loss	≥55		dB
Operating Temperature	-40 ~ +85		°C
Storage Temperature	-40 ~ +85		°C
Package Dimensions	250um Bare fiber	Φ3.0X56	mm
	900um Loose tube	Φ4.0X65	mm
	2mm、3mm Loose tube	100X80X10	mm

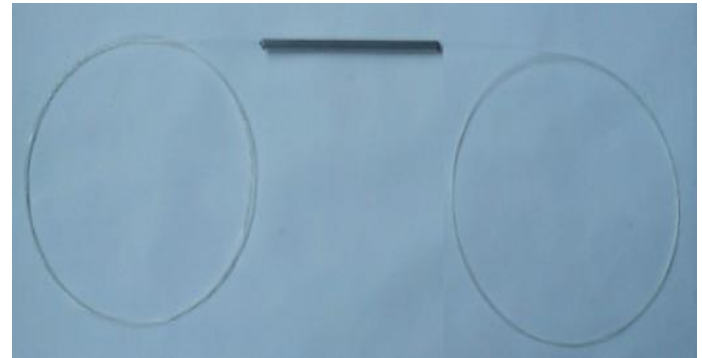
Note:

1. Insertion Loss is measured within whole operating band, not include PDL.
2. Values are referenced without connectors.
3. Other package dimension and optical performance can meet customer design.
4. Operating temperature is -20~+75 °C for 0.9mm、2mm、3mm cable package.

1X4 Single Mode Single Window Narrow Band Coupler

Features:

- Low PDL
- Low Insertion Loss
- High Directivity
- Stable and Reliable



Applications:

- Fiber Communication System
- Optical Testing System
- CATV、FTTH

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Specification			
Port Configuration	1X4		Unit
Operating Wavelength	1310,1490,1550		nm
Bandwidth	1310±20,1490±10,1550±20		nm
Coupler Ratio	25:25:25:25		%
Insertion loss	Typ.	A Grade	dB
	≤6.5	≤7.0	
PDL	≤0.25	≤0.30	dB
Return Loss	≥55		dB
Operating Temperature	-40 ~ +85		°C
Storage Temperature	-40 ~ +85		°C
Package Dimensions	250um Bare fiber	Φ3.0X56	mm
	900um Loose tube	Φ4.0X65	mm
	2mm、3mm Loose tube	100X80X10	mm

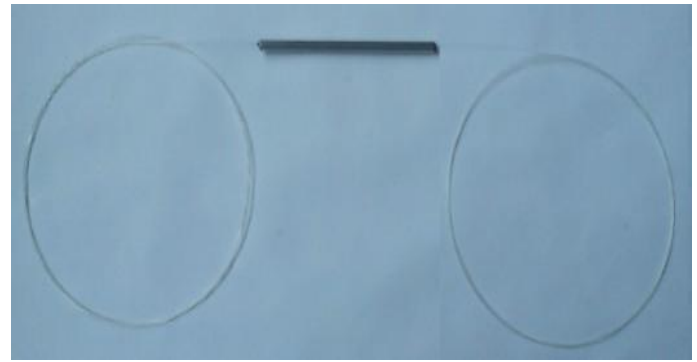
Note:

1. Insertion Loss is measured within whole operating band, not include PDL.
2. Values are referenced without connectors.
3. Other package dimension and optical performance can meet customer design.
4. Operating temperature is -20~+75°C for 0.9mm、2mm、3mm cable package.

1X4 Single Mode Single Window Wideband Coupler

Features:

- Low PDL
- Low Insertion Loss
- High Directivity
- Stable and Reliable



Applications:

- Fiber Communication System
- Optical Testing System
- CATV、FTTH

Specification			
Port Configuration	1X4		Unit
Operating Wavelength	1310,1550		nm
Bandwidth	1310±40,1550±40		nm
Coupler Ratio	25:25:25:25		%
Insertion loss	Typ.	A Grade	dB
	≤6.5	≤7.0	
PDL	≤0.25	≤0.30	dB
Return Loss	≥55		dB
Operating Temperature	-40 ~ +85		℃
Storage Temperature	-40 ~ +85		℃
Package Dimensions	250um Bare fiber	Φ3.0X56	mm
	900um Loose tube	Φ4.0X65	mm
	2mm、3mm Loose tube	100X80X10	mm

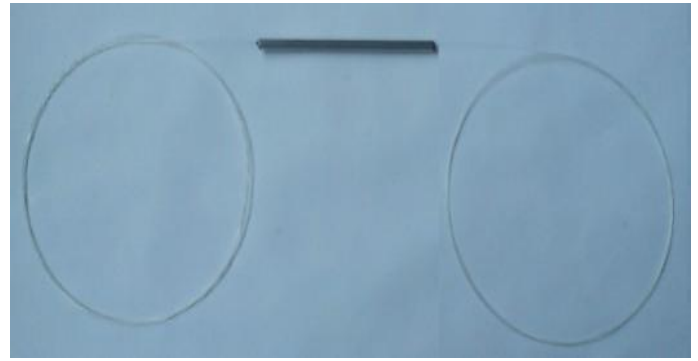
Note:

1. Insertion Loss is measured within whole operating band, not include PDL.
2. Values are referenced without connectors.
3. Other package dimension and optical performance can meet customer design.
4. Operating temperature is -20~+75℃ for 0.9mm、2mm、3mm cable package.

1X4 Single Mode dual Window Wideband Coupler

Features:

- Low PDL
- Low Insertion Loss
- High Directivity
- Stable and Reliable



Applications:

- Fiber Communication System
- Optical Testing System
- CATV、FTTH

Specification			
Port Configuration	1X4		Unit
Operating Wavelength	1310,1490,1550		nm
Bandwidth	1310±20,1490±10,1550±20		nm
Coupler Ratio	25:25:25:25		%
Insertion loss	Typ.	A Grade	dB
	≤6.8	≤7.2	
PDL	≤0.25	≤0.30	dB
Return Loss	≥55		dB
Operating Temperature	-40 ~ +85		°C
Storage Temperature	-40 ~ +85		°C
Package Dimensions	250um Bare fiber	Φ3.0X56	mm
	900um Loose tube	Φ4.0X65	mm
	2mm、3mm Loose tube	100X80X10	mm

Note:

1. Insertion Loss is measured within whole operating band, not include PDL.
2. Values are referenced without connectors.
3. Other package dimension and optical performance can meet customer design.
4. Operating temperature is -20~+75 °C for 0.9mm、 2mm、 3mm cable package.

Fiber Coupler Naming Rules

X X X								
Type	Input	Output	Grade	Coupler	Wavelength	Fiber	Pigtail Style	Connector
	Port number			Ratio		length		
SSC: Single mode single window narrow band coupler	1: 1	2: 2	P: P Grade	50:50/50	13:1310nm	1:1m	0.25:Bare fiber	1:FC/PC
SWC: Single mode single window wide band coupler	3: 3	4: 4	A: A Grade	40:40/60	14:1490nm	2:2m	0.9:900um loose tube	2:FC/APC
DWC: Single mode dual window wide band coupler				30:30/70	15:1550nm	3:3m	3.0:3mm Cable	3:SC/PC
TWC: Single mode triple window wide band coupler				20:20/80	13/15:1310/1550nm			4:SC/APC
WDM: Single mode 1310/1550nm WDM coupler				05:5/95				
				01:1/99				