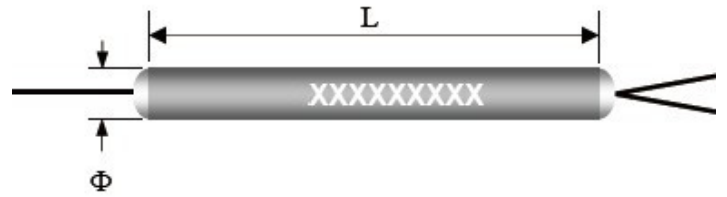




Single Mode Single Window Coupler

DK Photonics' Single mode coupler 1X2/2X2 offer very low insertion loss, low polarization dependence and excellent environmental stability Accurate coupling ratio from 50/50 to 1/99 and fiber type 250um bare fiber, 3mm and 900um loose tube fiber are available with very tight uniformity. Singlemode standard coupler and wideband coupler components find extensive application to perform power splitting and monitoring functions in all kinds of optical communication systems.

The products are Telcordia GR-1221/1209-CORE qualified, and RoHS compliant.



Features

- ◆ Low excess loss
- ◆ Various coupling ratio
- ◆ Compact size

Applications

- ◆ Long-haul telecommunications
- ◆ CATV systems & Fiber sensors
- ◆ Local area network

Performance Specifications

Parameter	Specification
Coupling Ratio (%)	1-50
Directivity (dB)	≥55 dB
Operating Temperature	-40 ° C - 85 ° C
Storage Temperature	-40 ° C - 85 ° C
Fiber Type	Corning Singlemode SMF-28 , DS Fiber, or Flexcore
Fiber Pigtail Length (m)	1meter
Port Configuration	1x2 or 2x2
Package Dimension	Seeing Package Information

Single mode Standard Couplers

Grade	Premium	A Grade
Coupling Ratio (%)	50/50	50/50
Excess Loss (Typical)(dB)	0.1	0.15
Maximum Insertion loss (dB)	3.4	3.5
Polarization Sensitivity (dB)	0.1	0.15
Operating Wavelength (nm)	1310+10, 1550+10, others on request	



Single mode Wideband Coupler

Grade	Premium	A Grade
Coupling Ratio (%)	50/50	50/50
Excess Loss (Typical)(dB)	0.1	0.2
Maximum Insertion loss (dB)	3.4	3.5
Polarization Sensitivity (dB)	0.1	0.15
Operating Wavelength (nm)	1310+40, 1550+40, others on request	

Coupling Ratio/Insertion Loss Conversion Chart

Coupling Ratio	Insertion Loss	
	Premium	A Grade
40/60	4.4/2.5	4.6/2.8
30/70	5.6/1.8	6.0/2.0
20/80	7.4/1.1	7.7/1.3
10/90	10.8/0.6	12.0/0.8
5/95	14.6/0.4	15.7/0.55
2/98	19.0/0.2	19.5/0.3
1/99	21.0/0.2	21.5/0.3

*The above specification is without connector

**Other specifications can be made on customer request.

Package Information

Package Type	A	B	C	D
Fiber Diameter	250µm bare fiber	250µm bare fiber	900µm loose tube	900µm/2mm/3mm loose tube
Dimensions (Φ×L)	Φ3.0mm×40mm	Φ3.0mm×54mm	Φ3.0mm×60mm	90mm×20mm×9.5mm

Order information

FBT-X-①-②②-③③-④④④④-⑤-⑥-⑦⑦-⑧⑧-⑨⑨

X	①	②②	③③	④④④④ ④	⑤	⑥	⑦⑦	⑧⑧	⑨⑨
Type	Grade	Wavelength	Coupling Ratio (dB)	Port	Package	Fiber Type	Fiber Diameter	Fiber Length	Connector
S: Standard W: Wide-band	P: P Grade A: A Grade	83:830nm 85:850nm 98:980nm 13:1310nm 14:1480nm 15:1550nm XX: Others	50:50/50 40:40/60 30:30/70 20:20/80 10:10/90 05:5/95 03:3/97 02:2/98 01:1/99 XX: Others	0102:1x2 0202:2x2	A:Package A B:Package B C:Package C	0:SMF-28 1:Corning Flexcore 1060 2:Corning Flexcore 780nm D:DS Fiber X: Others	25:250µm 90:900µm 20:2.0mm 30:3.0mm XX: Others	05:0.5m 10:1.0m 15:1.5m XX:Others	00:None FP: FC/PC FA: FC/APC SP: SC/PC SA: SC/APC LP: LC/PC LA: LC/APC ST: ST/PC XX: Others