

Compact Fiberoptic Coupler/Splitter 1x3



DATASHEET

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Features

- Wavelength Independent
- Ultra Low Excess Loss
- Low Polarization Sensitivity
- Highly Stable & Reliable
- Ultra Low Cost

Applications

- Telecommunications
- CATV
- LAN
- Instrumentation

The FC Series 1x3 Compact Fiberoptic Splitter is based on Agiltron's fused biconical taper technology and compact packaging structure. It features superior uniformity, low excess, and very low polarization sensitivity. The device is ideal for splitting or combining light with exceptional performance over a wide wavelength range.

Couplers are highly efficient in splitting light with little loss, about 0.2dB per joint, but incur significant losses when combining lights; for example, a 50/50 coupler produces a 50% loss to each beam when combined. For beam-combining applications, search Combiner.

Specifications

Parameter	Min	Typical	Max	Unit
Operation Wavelength	1290~1330 or 1525~1565			nm
Wavelength Bandwidth		± 20		nm
Insertion Loss ^[1]		< 5.5		dB
Uniformity (50/50)		< 0.9		dB
Polarization Dependent Loss		< 0.10		dB
Temperature Sensitivity		< 0.002		dB/°C
Directivity		> 55		dB
Return Loss ^[2]		> 55		dB
Optical Power Handling		< 4		W
Operating Temperature	-10		70	°C
Storage Temperature	-40		85	°C
Fiber Type and Length	Corning SMF-28, Length >1			m

Notes:

- [1]. Without connector. Each connector adds 0.3dB and 0.5dB for short wavelength
- [2]. Without connector. Each connector adds 5dB

Note: The specifications provided are for general applications with a cost-effective approach. If you need to narrow or expand the tolerance, coverage, limit, or qualifications, please [\[click this link\]](#):

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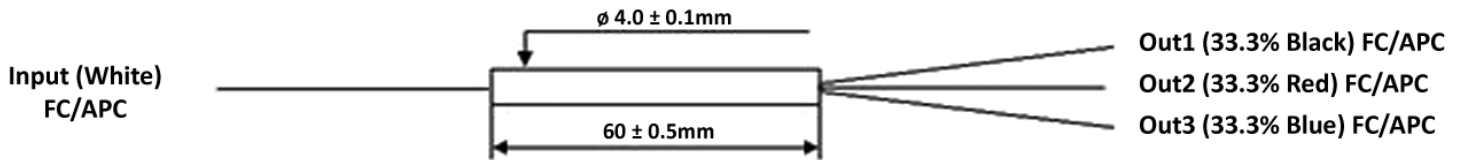
Rev 06/22/25

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Mechanical Dimensions (mm)



*Product dimensions may change without notice. This is sometimes required for non-standard specifications.

Ordering Information (Part Number)

Prefix	Type	Wavelength	Grade	Package	Coupling Ratio	Port	Fiber Type	Fiber Cover	Connector
FC-		1310 = 3 1480 = 4 1550 = 5 Special = 0	Premium = 1 Special = 0	Special = 0	30/30/30 = 9 Special = 0		SMF-28 = 1 SM1950 = 2	Bare fiber = 1 900um tube = 3 Special = 0	None = 1 FC/PC = 2 FC/APC = 3 SC/PC = 4 SC/APC = 5 ST/PC = 6 LC/PC = 7 LC/UPC = U Special = 0