



Multicore Fiber

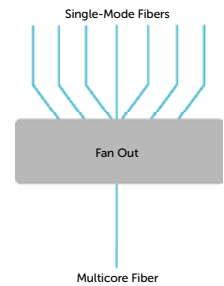
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Datasheet

Fan Outs

The multicore fan out component is a fully packaged unit with multiple Single-Mode (SM) fibers on the input side and a single Multicore Fiber (MCF) on the output. The fan out unit utilizes 3D waveguide technology to allow efficient optical coupling from the SM fibers to the MCF with minimal insertion loss, polarization dependent loss and low crosstalk.

The 3D waveguide technology is designed for maximum flexibility, capable of having the core position optimized for customized MCFs. Based on automated wafer level techniques, the waveguide technology is capable of scaling up to mass manufacturing quantities for future large volume demands.



Advantages:

- Compact package size
- High data rates
- Scalable manufacturing technique

Typical applications:

- 3D shape sensing
- 2D bend sensing
- Active Optical Cables (AOCs)
- High bandwidth telecommunications
- Distributed sensing

Related Products:

- Single-Mode 4 Core (SM-4C)
- Single-Mode 7 Core (SM-7C)
- Spun Single-Mode 7 Core (SSM-7C)

Product Variants:

- **FAN-4C** Fan-out unit designed to guide light from a 4 core fiber into 4 separate SMF28 pigtails
- **FAN-7C** Fan-out unit designed to guide light from a 7 core fiber into 7 separate SMF28 pigtails



Specifications

	FAN-4C	FAN-7C
Operating Wavelength (nm)	1550	
Insertion Loss (dB)	≤1.0	
Polarization Dependant Loss (dB)	≤1.0	
Number of Cores	4	7
Crosstalk (dB)	≤-50	
Core Configuration	Square	Hexagonal plus central core
Input Fiber Type	SMF-28 or equivalent	
Output Fiber Type	SM-4C1500(8.0/125)/001	SM-7C1500(6.1/125) SSM-7C1500(6.1/125)
Operating Temperature (°C)	0 to +80	
Connectorization	FC/APC on SMF (other connectorization options available)	