# 9 Micron Single Mode Fiber (G.652D/G.654E/G.655/G.657A1/G.657A2/B3) for High-Speed Long-Distance Communication

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| Brand Name | Corning/Draka/SDGI | Cladding Roundness Deviation | ⩽1.0% |
| Model Number | G.652D/G.654E/G.655/G.657A1/G.657A2/B3 | Concentricity Deviation Of The Core & Cladding | ⩽0.6um |
| Product Name | Single Mode Fiber | Warpage | ⩾4m |
| Cladding Diameter | 125±0.7 Microns | Fiber Type | Single Mode |

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| Cut-off Wavelength | ⩽1260nm | Price | Negotiation |
| Attenuation | 0.33dB/km @1310 Nm, 0.34dB/km @1383 Nm, 0.20 DB/km @1550 Nm, 0.24dB/km @1625nm | Highlight | 9 Micron Single Mode Fiber, Single Mode Fiber G.652D, G.657A2 Optical Fiber |
| Coating Diameter | 250 Microns | - | - |

The Single-Mode Fiber product is specifically designed for high-performance communication applications that require precise transmission of signals over long distances. With a coating diameter of 250 microns, this fiber optic cable provides a protective layer that ensures optimal signal integrity and durability.

Featuring a warpage of ⩾4m, this Single-Mode Fiber product is engineered to maintain its structural integrity even under challenging environmental conditions. This attribute makes it a reliable choice for applications that demand consistent performance in varying scenarios.

The Cladding Diameter of this Single-Mode Fiber is 125±0.7 microns, offering a precise outer layer that enhances signal transmission efficiency. Additionally, the cladding roundness deviation of ⩽1.0% ensures that the fiber maintains a uniform shape, reducing signal loss and enhancing overall performance.

Designed to operate in a wide range of temperatures, from -40°C to +85°C, this Single-Mode Fiber product is suitable for deployment in diverse environments without compromising its functionality. Whether used in extreme cold or hot conditions, this fiber optic cable delivers reliable performance consistently.

Whether it's for 5G communication, Fiber to the Home (FTTH) installations, or any other high-speed data transmission applications, this Single-Mode Fiber product offers a reliable and efficient solution. Its precise construction and robust design make it an ideal choice for demanding communication networks that require high data transfer rates and low signal interference.

## Applications:

Single Mode Fiber is an essential component in various networking and telecommunications applications due to its high performance characteristics. Known for its ability to carry a single mode of light, this type of fiber optic cable is ideal for long-distance data transmission with minimal signal loss. The following are some of the key Product Application Occasions and Scenarios for the Single Mode Fiber across different brands and models: Corning G.652D: - Data center single-mode fiber: Corning G.652D single-mode fiber is well-suited for high-speed data transmission within data center environments. Its low attenuation and

dispersion characteristics make it ideal for supporting high-bandwidth applications. Draka G.654E: - Fiber to the home (FTTH) single-mode fiber: Draka G.654E single-mode fiber is perfect for FTTH deployments, providing reliable and fast connectivity to homes and businesses. Its high warpage tolerance ensures stable performance even in challenging installation scenarios. SDGI G.655: - High-bandwidth single-mode fiber: SDGI G.655 single-mode fiber is designed for applications requiring high bandwidth capacity, such as long-haul telecommunications networks. Its cut-off wavelength of ⩽1260nm ensures efficient signal transmission over long distances. Additionally, the origin of the Single Mode Fiber can vary, with options including China or Netherland. The 250-micron coating diameter and 9-micron core diameter ensure durability and efficient light transmission. With a warpage of ⩾4m, this fiber type can withstand various environmental conditions while maintaining signal integrity. In conclusion, whether it is for data center networking, FTTH deployments, or high-bandwidth telecommunications networks, Single Mode Fiber from reputable brands such as Corning, Draka, or SDGI offers reliable and efficient connectivity solutions for a wide range of applications.