



## ClearLite® 1550 17 Optical Fiber

P/N: BF06158

### Product Overview

Our full line of optical fibers operating at 1550 nm includes a variety of coating options, NAs, and mode field diameters to optimize performance in different applications. The longer cutoff of these fibers, as compared to standard transmission fiber, offers improved optical bend performance.

### Typical Applications

- Fiber Optic Strain, Pressure, and Acoustic Sensors
- Fiber Payout
- Medical Sensing and Imaging
- WDM Devices

### Product Specifications

| Product Description                 | ClearLite 1550 17 Optical Fiber                                                                      |
|-------------------------------------|------------------------------------------------------------------------------------------------------|
| <b>Physical Characteristics</b>     |                                                                                                      |
| Coating Material                    | Dual UV Acrylate                                                                                     |
| Core Diameter (Nominal)             | 6.5 $\mu\text{m}$                                                                                    |
| Cladding Diameter                   | 125 $\pm$ 2 $\mu\text{m}$                                                                            |
| Coating/Buffer Diameter             | 245 $\pm$ 15 $\mu\text{m}$                                                                           |
| Clad Non-Circularity                | $\leq$ 2.0%                                                                                          |
| Core/Clad Offset                    | $\leq$ 0.75 $\mu\text{m}$                                                                            |
| <b>Optical Characteristics</b>      |                                                                                                      |
| Type                                | Single-Mode                                                                                          |
| Operating Wavelength                | 1550 nm                                                                                              |
| Cutoff Wavelength                   | $\leq$ 1500 nm                                                                                       |
| Mode Field Diameter @ 1550 nm       | 7.5 $\pm$ 0.75 $\mu\text{m}$                                                                         |
| Attenuation @ 1550 nm               | $\leq$ 0.6 dB/km                                                                                     |
| Numerical Aperture (Nominal)        | 0.17                                                                                                 |
| <b>Mechanical and Environmental</b> |                                                                                                      |
| Operating Temperature               | -40 to +85 °C                                                                                        |
| Short-Term Bend Radius              | $\geq$ 10 mm                                                                                         |
| Long-Term Bend Radius               | $\geq$ 17 mm                                                                                         |
| Proof Test Level                    | $\geq$ 100 kpsi (0.689 GPa)                                                                          |
| <b>Order by Part Number</b>         | <b>BF06158</b>                                                                                       |
| Product Description Code            | SMB-E1550B                                                                                           |
| OPTIONS                             | Buffer Color, Buffer Material, Buffer Size, Cutoff Wavelength, Metalization, Proof Test, Termination |

|                                 |                                                                                                                                                                                                                                                                                                          |
|---------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Contact Information             | For additional information please contact your sales representative. You can also visit our website at <a href="http://www.lightera.com">www.lightera.com</a> or call 1-888-FIBERHELP (1-888-342-3743) USA or 1-770-798-5555 outside the USA. For a full list of our certifications, visit our website.  |
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