Overview

GEO50 SA is designed for distributed temperature sensing applications and will function in the mid-temperature range up to 125 ºC for up to 20 years. The fiber is protected against moisture and hydrogen ingression across the temperature range. The fiber’s high-temperature, silicone/acrylate coating makes it resistant to water and chemicals, and cushions it for deployment and service in harsh environments.
## Product Specifications

### GEO50 SA Geophysical Graded-Index Optical Fiber

<table>
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<tr>
<th>Physical Characteristics</th>
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| **Coating Material**     | High-Temperature Silicone/Acrylate  
| **Core Diameter**        | 50 ± 3 µm    
| **Cladding Diameter**    | 125 ± 2 µm   
| **Coating Diameter**     | 250 ± 10 µm  
| **Core/Clad Offset**     | ≤ 3%         
| **Core Non-Circularity** | ≤ 5%         
| **Clad Non-Circularity** | ≤ 2.0%       
| **Crimp & Cleave Compatible** | No      

### Optical Characteristics

| **Type** | Multimode Graded-Index  
|----------|
| **Numerical Aperture** | 0.20        
| **Bandwidth @ 1300 nm** | ≥ 400 MHz-km  
| **Bandwidth @ 850 nm** | ≥ 400 MHz-km  
| **Attenuation @ 1300 nm** | ≤ 2 dB/km    
| **Attenuation @ 850 nm** | ≤ 4 dB/km    
| **Coating/Buffer Descriptions** |  
| **Hermetic Carbon Layer** | 300 to 400 Å  
| **Operating Temperature (Continuous)** | -45 to +125 ºC  

### Mechanical and Environmental

| **Short-Term Bend Radius** | ≥ 8 mm  
| **Long-Term Bend Radius** | ≥ 10 mm  

### Proof Test Level

| **Order by Part Number** | F18961-02  

**OPTIONS:** Additional coatings, cabling, connectorization, metalization, other upgrades

**NOTES:** OFS polyimide optical fibers are known to operate in environments up to 300 ºC. Performance is application dependent. Contact our Technical Sales department to discuss your specific application requirements.

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For additional information please contact your sales representative.

You can also visit our website at www.ofsoptics.com or call 1-888-fiberhelp (1-888-342-3743) USA or 1-770-798-5555 outside the USA.

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