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## Datasheet

# Single Mode Simplex Fibre Optic Connector

RS Stock number 536-8109



## Description

The ST connector has been the main stay of optical fibre connectors for many years. It can be found in almost every communications room world wide, but used mainly in data communications Systems. The simple to use bayonet locking mechanism reduces the risks of accidental disconnection.

The optical fibre connector compromises of nickel plated brass body and a ceramic ferrule/spring/crimp barrel assembly plus a crimp over sleeve and rubber boot. These connectors are Suitable for 900um and 2-3mm cables. The connector is precision made and manufactured to Demanding specifications.

The combination of a ceramic ferrule and precision metal housing provides consistent long-term Mechanical and optical performance.

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## Specification

### Description

The ST connector is the most popular connector used today. It can be seen in every area of the communications environment, from a telecoms distribution room to a local area network closet the ST has set the standard for optical fibre connectors.

The Optronics ST connectors are manufactured using the highest quality components. The connectors exceeds all areas of the standards covering optical fibre connectors.

### Versions Available:

2mm Patch  
3mm Patch  
900 µm

### Termination Procedures

Prep cable end, Epoxy-Crimp-Polish

### Product Packaging

Standard packaging: 100pcs bulk packed  
Special packaging available by request

### Colours

2 & 3 mm Boot, Black, Red, Yellow  
900 µm Boot, Black, Blue, Yellow

### Intermateability

Optically and mechanically compatible with all equivalent connectors.  
Compliant with IEC 61754-2.

### Optical Performance

#### Singlemode

Insertion loss: Max. 0.3 dB Typical 0.2 dB

Return Loss: UPC > 50dB Typical 55 dB

#### Multimode

Insertion loss: Max. 0.3 dB Typical 0.12 dB

### Mechanical

Capillary diameter tolerance:  
SM—126 ± 0.5µm  
MM—127 ±/ - 0.5µm  
Ferrule Diameter: 2.5mm ± .001  
Ceramic pre-radiused, PC-end finish for Physical  
Contact ferrule to ferrule. R 10 to 25mm

Tensile Strength Cable retention: >50 N  
(2 & 3mm boot versions only)

### Vibration (Mated Pair):

(IEC 61300-2-1)  
10-55 Hz, 1.5mm P to P  
=0.3dB Change

### Mating Durability:

(IEC 61300-2-2)  
1000 mating cycles  
Clean every 25  
< 0.2 dB Change

### High Temperature:

(IEC 61300-2-18)  
75°C for 96 hours  
=0.2dB Change

### Damp Heat:

(IEC 61300-2-19)  
60°C at 95% RH, 96 hours  
=0.2dB Change

### Temperature Cycling

(IEC 61300-2-48)  
-40 to +85°C, 42 cycles  
=0.2dB Change

### Operating Temperature

-40°C to +85°C