

## Datasheet

# Single Mode 5dB Attenuator

RS Stock number 536-8121



### Features

- Plug-In type package
- Accurate attenuation
- Ultra low back reflection
- Broad wavelength band
- Available with SC, FC, LC and MU packages
- Flat Response over all wavelengths
- Environmentally Stable
- Quick Delivery

### Applications

- Telecommunication Networks
- Fibre optic sensors
- Test and measurement
- CATV
- LAN and WAN
- FTTx

### Descriptions

Single mode attenuators are used in communication systems to reduce optical power launched onto the photo detector. These high performances devices are designed to give accurate attenuation over a wide range of wavelengths. The plug type configuration allows you to use directly on the ends of the fibre jumpers and to insert directly in to the adapter.



**Description**

The Optronics optical attenuators are manufactured using the best quality components.

For full information on the full range FibreFab products, please contact the address below for a data sheet.

**Dimensions**

FC — 10mm (diameter) x 30mm (L)  
 SC — 35mm (L) x 12.7mm (W) x 9.5mm (D)

**Intermateability**

Optically and mechanically compatible with all equivalent connectors.  
 Compliant with IEC 874-14.

**Product Packaging**

Each attenuator is packaged individually.

**Temperature Cycling**

(IEC 874-1 sec. 4.5.22)  
 -40 to +75°C, 40 cycles  
 =0.2dB Change

**High Temperature:**

(IEC 874-1 sec. 4.5.18)  
 75°C for 96 hours  
 =0.2dB Change

**Damp Heat:**

(IEC 874-1 sec. 4.5.19)  
 60°C at 95% RH, 96 hours  
 =0.2dB Change

**Vibration (Mated Pair):**

(IEC 874-1 sec. 4.5.1)  
 10-55 Hz, 1.5mm P to P  
 =0.3dB Change

**Mating Durability:**

(IEC 874-1 sec. 4.5.32)  
 1000 mating cycles  
 Clean every 25  
 < 0.2 dB Change

**Operating Temperature**

-40°C to +85°C

**Connector type**

SC / FC / LC / MU

**Available Range of attenuation**

1 to 30 dB with 1dB increments  
 (or custom attenuation within this range)

**Operating Wavelength**

1310nm and 1550nm (Or single wavelength)

**Operating Band pass**

Digital Band 1260-1360nm and 1430-1580nm  
 (BellcoreSpec.)  
 S + C + L Band 1480-1610nm  
 Special Bandpass 1310±25nm and 1470-1610nm  
 Single Window 1280-1340nm or 1510-1590nm  
 Dual Window 1310 and 1550nm (±25nm)

**Attenuation Tolerance**

Attenuators ≤ 5dB ± 0.5 dB  
 Attenuators, 6 to 30 dB ± 10% of attenuation

**Reflectance**

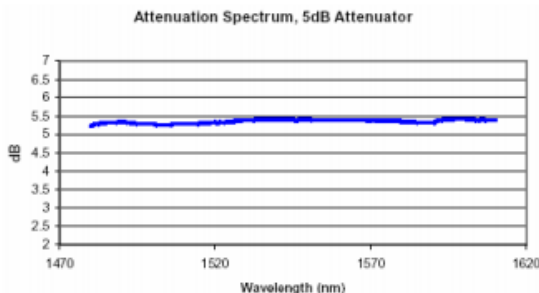
SPC ≤ 50 dB  
 UPC ≤ 55 dB  
 APC ≤ 60 dB

**International Standard**

Telcordia GR-910-CORE

**Ordering Information**

FA — [ ] — [ ] — [ ]  
 SC SC/APC S= Singlemode 05= 5dB  
 FC FC/APC M= Multimode 10= 10dB  
 LC 20= 20dB  
 MU 25= 25dB



Other versions available to special order