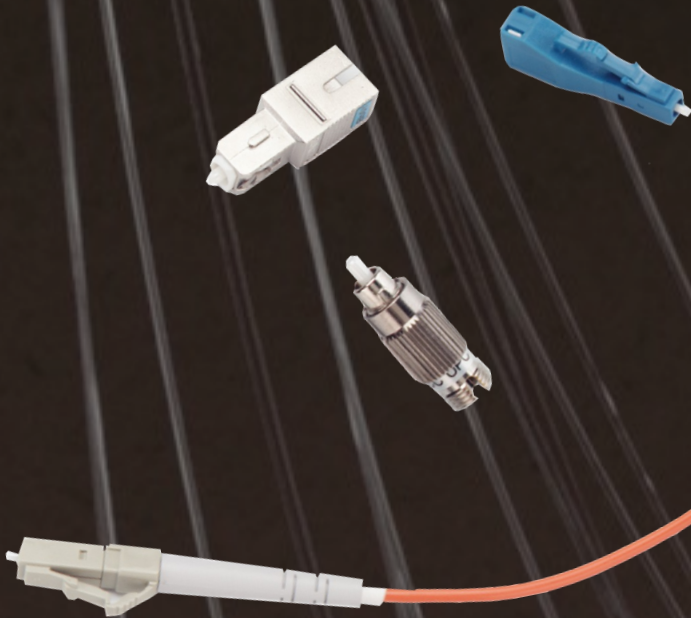


# Fixed Attenuators

timbercon



## ▶ BENEFITS

- Multiple fiber types
- Multiple attenuation methods
- Compact size
- Precise optical performance

## ▶ APPLICATIONS

- DWDM applications
- Test & measurement
- Optical sensors
- Telecommunications applications

## Timbercon Fixed Attenuators provide light transmission at the precise level required

Fixed attenuators from Timbercon offer defined control of optical signals in both integrated and add-on products.

Depending on the project or need, fixed attenuators can limit (attenuate) the amount of light passing through to the exact level your project or application requires. These precise attenuation levels provide for highly accurate performance.

Timbercon fixed attenuators are used in applications where a pre-determined amount of light loss is specified. Though its applications range widely, fixed attenuators are most commonly used for test and measurement, optical sensors, and telecommunications applications.

## ▶ PREMIUM SOLUTIONS

## ▶ SPECIFICATIONS

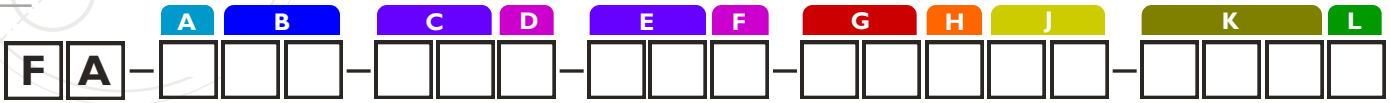
Optical Loss	SM	MM
0 - 10 dB	±1 dB	±1 dB
11 - 24 dB	±10%	±10%
25 - 30 dB	±10%	-

## ▶ FEATURES

- Single-mode and multimode versions
- Core off-set, air gap, and filtered versions
- Low insertion loss and back reflection
- Definable attenuation from 1dB to 20dB
- PC, UPC, and APC polish types
- Available with FC, SC, ST, LC, and MU termini

# Fixed Attenuators

PART NUMBER GENERATOR



## A - Fiber Type

- 5 MM 50um
- 6 MM 62.5um
- 7 OM3 MM 50um
- 9 SM 9um
- 0 Custom

## B - Construction Type

- 01 Bare 250um
- 02 900um
- 03 SX Riser 1.6
- 04 SX Riser 2.0
- 05 SX Riser 3.0
- 06 SX Plenum 1.6
- 07 SX Plenum 2.0
- 08 SX Plenum 3.0
- 11 DX Riser 3.0
- 20 Build out Style
- 99 Custom

## C/E - Connector

- 03 FC
- 04 FC APC N
- 07 LC
- 08 LC APC
- 11 MTP Custom
- 19 MU
- 21 SC
- 22 SC APC
- 25 SMA 905
- 26 SMA 906
- 27 ST
- 99 Custom

## D/F - End Polish

- 1 MM PC
- 3 SM UPC
- 4 SM APC
- 5 Flat

## G - Wavelength

- 01 850 nm
- 02 1310 nm
- 07 1550 nm
- 12 1310 nm / 1550 nm

## H - Light Source

- 1 LED
- 2 VCSEL
- 3 Fabry Perot
- 4 DFB
- 5 DFB or FP
- 9 Custom

## J - Attenuation

- |          |           |
|----------|-----------|
| 00 0 dB  | 13 13 dB  |
| 01 1 dB  | 14 14 dB  |
| 02 2 dB  | 15 15 dB  |
| 03 3 dB  | 16 16 dB  |
| 04 4 dB  | 17 17 dB  |
| 05 5 dB  | 18 18 dB  |
| 06 6 dB  | 19 19 dB  |
| 07 7 dB  | 20 20 dB  |
| 08 8 dB  | 21 21 dB  |
| 09 9 dB  | 22 22 dB  |
| 10 10 dB | 23 23 dB  |
| 11 11 dB | 24 24 dB  |
| 12 12 dB | 99 Custom |

## K - Length

Enter lead length in whole numbers. Use block (L) to specify unit of measure.

EXAMPLE:  
10 Meter Cable =  
(K) 0010  
(L) M

## L - Unit of Measure

- N Inches
- F Feet
- C Centimeters
- M Meters
- K Kilometers

PERFORMANCE

Insertion Loss (Typical)	SM	MM
FC, ST, SC, LC, MU	0.15 dB	0.35 dB
MTRJ	0.30 dB	0.30 dB
Back Reflection (Typical)	≤-55 dB	≤-35 dB
Mating Durability (500 Cycles)	<0.20 dB	<0.20 dB
Temperature Range	-40°c to 85°c	-40°c to 85°c

TIP

Attenuators may be used to prevent accidental overload or damage to your optical receiver by reducing the optical power.

ABOUT

Founded in 1997, Timbercon, Inc. is a fiber optic product and solution manufacturing company providing a vast array of connectivity solutions to the data storage, telecommunications, military, industrial, broadcast and networking industries. In addition to standard fiber optic patch cords and attenuated test cables, Timbercon has pioneered proprietary products, many of which are now considered to be an industry benchmark.

CONSTRUCTION

Cable Assemblies	Buffer	Strength Member	Jacket
900 um	900 um	-	PVC
3mm Riser	900 um	Kevlar	PVC
3mm Plenum	900 um	Kevlar	PVDF
Length Tolerance (Cables)	<1m: +5cm / -0cm 1m - 10m: +10cm / -0cm >10m: +2% / -0%		

### Buildout Attenuators

- SM: Ceramic
- MM: Phosphorus Bronze

