

630 Series SM Fixed Fiber Attenuator

Components

Overview

ARIA's singlemode fixed fiber optic attenuators are fused-biconic-taper products with excellent operational stability.

Manufactured on a highly automated fiber coupler workstation.

These fixed in-line fiber attenuators have excellent repeatability and uniformity.

They are ideal for CATV systems, telecommunications, signal processing, sensor systems and laboratory use.



Features

- Precise attenuation values
- Environmentally stable and reliable
- Small size for miniaturized systems
- Excellent return loss

Applications

- Telecommunications
- CATV
- Subscriber loop
- Fiber-to-the-home
- Test equipment
- Optical fiber sensors
- Source distribution

Specifications

| Parameter | Value |
|-----------------------------------|--|
| Operating Wavelength (nm) | 1550, 1310, 980* or 850* (*Narrow Band only) |
| Attenuation Range (dB) | 3~30 |
| Attenuation Variation (dB) | +0.5 |
| | +1 |
| Band Width (nm) | +10 |
| | +40 |
| Return Loss (dB) | 55 |
| Operating Temperature (C) | -40 to +85 (-20 to +70C for 3mm cable) |
| Storage Temperature (C) | -40 to +85 |
| Packaging (mm) | S:3(Ø)x54(L) |
| | L:3Øx60(L) |
| | C:3Øx12(W)x10(H) |

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Environmental Reliability Tests

- Comply with Telcordia requirement GR-910-CORE Optical characteristics
- Water Immersion Test: 43C, pH=5.5, 7 days
- Vibration Test: 55 Hz random , 1.55mm amplitude for 2 hours
- Flex Test: 0.5 or 2lb load, 100 cycles
- Twist Test: 1.1, 1.65 or 3 lb load 10 cycles
- Side Pull: 0.55 or 2.75 lb load, 90 degree angle, active
- Cable Retention: 1 lb, 1.54 lb or 4.4 lb load, for 1 min
- Durability: 200 cyc., 3 ft, 4.5 ft, 6 ft per GR-326
- Impact Test: 6 ft drop, 8 cycles, 3 axes

Part Number

630-
1 1 2 2 3 4 4 5 5 6 6

1 Wavelength

15 = 1550
13 = 1310
09 = 980
08 = 850
35 = 1310/1550
XX = Other

3 Bandwidth

N = Narrow Band
W = Wide Band
D = Dual Band

6 Connectors

LC = LC/UPC
SC = SC/UPC
FA = FC/APC
SA = SC/APC
ST = ST/UPC
0 = None
XX = Other

2 Attenuation

03 = 3dB
05 = 3dB
07 = 3dB
10 = 3dB
15 = 3dB
20 = 3dB
25 = 3dB
30 = 3dB

4 Fiber & Package

01 = 250u bare fiber, stainless steel tube
02 = 900u loose tube fiber, stainless steel tube
03 = 3mm cabled fiber, ruggedized case
04 = 250u bare fiber, ruggedized case
05 = 900u loose tube fiber, ruggedized case

5 Tail Length

05 = .05m
10 = 1.0m
15 = 1.5m
20 = 2.0m

Example: 3 dB SM narrow band attenuator for 1310 nm light, cased 3mm cable without connectors, tail length 1 meter).
Part Number: 630-13-03-N-C-10-00