

DESCRIPTION



Attenuators are used in fiber optic transmission systems to reduce the optical power received by photo-detectors. The light intensity of laser diodes and LED's should be controlled to be within their dynamical range. Otherwise, excess power level can result in undesired radiation pattern, modal structure and central wavelength. Such issue is even more critical for high-speed singlemode system where the laser is very sensitive to back reflection.

Controlling the light intensity emitted by the transmitter requires extra electronic circuitry. With the use of adaptor type attenuators, system tuning can now be accomplished at the destination office, immediately in front of the receiver, instead of in the field from the top of a bucket truck. This is much more convenient and can significantly speed up system installation. In addition, this will also reduce downtime in case of equipment failures.

FOCI's A-AF series fixed adaptor type attenuators are the most sophisticated devices suitable for all applications demanding high performance.

The A-AF series come with your choice of connector terminations, including APC, ASC, FC, SC, or ST compatible connectors. With the patented mode filter design, the A-AF series can enhance mode stability dramatically and be readily panel mounted without any dummy fiber.

FEATURES

- Environmentally stable
- Easy installation
- Custom designed specifications
- Low return loss
- Readily panel mountable
- Compact packaging

APPLICATIONS

- Telecommunications
- LAN
- CATV
- Fiber optic sensors
- Testing instruments
- Fiber to the home
- Multi-channel
- Subscriber loop
- Optical transmission system



FIXED
ADAPTOR TYPE ATTENUATORS

PERFORMANCE SPECIFICATIONS

<Standard>

| ITEM | Standard | Wideband |
|--|---|--------------|
| Operating Wavelength, nm | 850 or 1310 or 1550 | 1310 or 1550 |
| Bandwidth, nm | ± 10 | ± 40 |
| Attenuation, dB | 1 ~ 30 or otherwise specified | |
| Attenuation Accuracy typical, including connector | High grade : $\pm 1.0\text{dB}$ (for 1 ~ 10dB), <math>< \pm 10\%</math> (for 10 ~ 30dB) Average grade : $\pm 1.5\text{dB}$ (for 1 ~ 10dB), <math>< \pm 15\%</math> (for 10 ~ 30dB) | |
| Back Reflection, dB | <math>< -40</math> (for convex polishing), <math>< -60</math> (for Angled types) | |
| Operating Temperature, °C | -40 ~ 75 | |
| Storage Temperature, °C | -55 ~ 85 | |
| Connector Type | FC, SC, ST, FC/APC, SC/APC | |

<Wideband>

| ITEM | Wideband | | |
|--|--------------|---------|---------|
| Operating Wavelength, nm | 1310 or 1550 | | |
| Bandwidth, nm | ± 40 | | |
| Attenuation Accuracy typical, including connector | ITEM | H grade | A grade |
| | 5dB | ± 1.0 | ± 1.5 |
| | 10dB | ± 1.5 | ± 2.0 |
| | 15dB | ± 2.0 | ± 2.5 |
| | 20dB | ± 2.0 | ± 2.5 |

<Dual window>

| ITEM | Dual Window | | |
|--|--------------|---------|---------|
| Operating Wavelength, nm | 1310 or 1550 | | |
| Bandwidth, nm | ± 40 | | |
| Attenuation Accuracy typical, including connector | ITEM | H grade | A grade |
| | 5dB | ± 1.5 | ± 2.0 |
| | 10dB | ± 2.0 | ± 2.5 |
| | 15dB | ± 2.5 | ± 3.0 |
| | 20dB | ± 3.0 | ± 3.5 |

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ORDERING INFORMATION

