

Fixed Male to Female Attenuator

1. Product Description

Fixed male to female attenuator is a passive device used to reduce the intensity of optical signal without significantly changing the transmission wavelength. This device is used in transmission links such as dense wavelength division multiplexer (DWDM) and erbium-doped fiber amplifier (EDFA) with high intensity optical power. This product USES the patented metal ion erbium-doped fiber to effectively reduce the intensity of optical signal transmission. Compared with the optical fiber offset welding method that only changes the direction of optical transmission, the production process of this product has a significant difference in all aspects. It is suitable for 1310-1550, C and L bands, and can withstand the transmission of high-intensity light power over 1W for a long time, better adapting to EDFA and other high-power applications. Low polarization loss (PDL) and stable independent wavelength distribution make optical fiber attenuator an ideal choice for DWDM.

2. Product Application

*EDFA

*DWDM

*OADM

*CATV


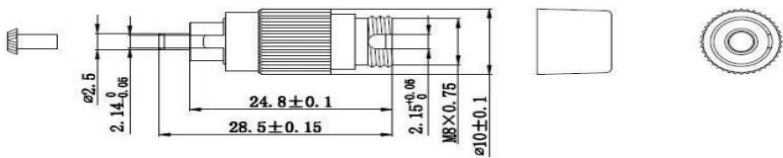
3. Product Features

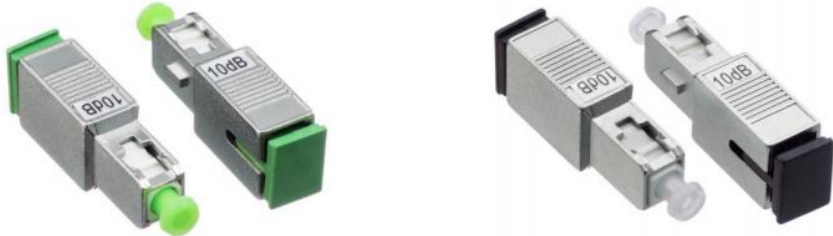
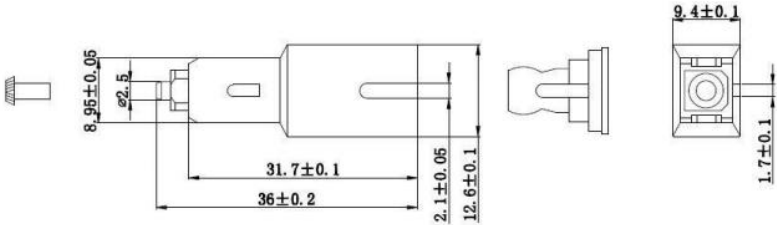

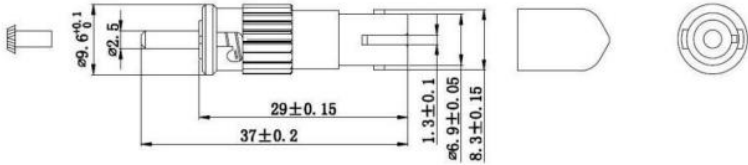
- * erbium-doped metal ion attenuation fiber is adopted
- * long time to withstand high power optical signal transmission
- * 1260-1640nm bandwidth, applicable to both 1310 and 1550 wavelengths
- * attenuation range 0-30db, distinguish between standard and quality products with two different indicators


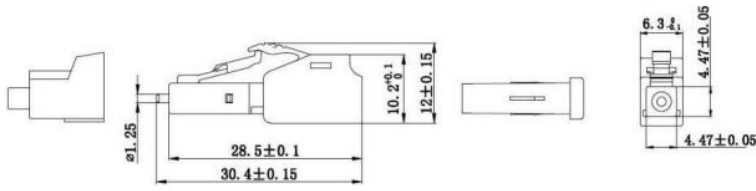

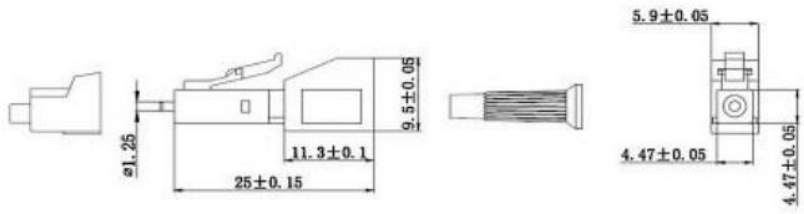
4. Products Indicators


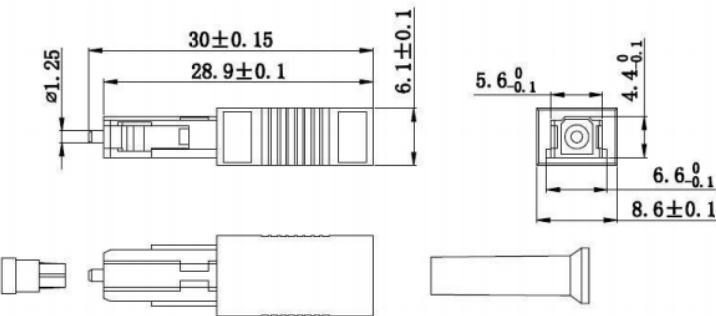
	Unit	Condition	Standard(R Level)
Attenuation Range	dB	UPC&APC	0-30
Attenuation deviation	dB	0-4	-0.5~+0.5
	dB	5-10	-10%*X~+10%*X
	dB	11-30	
Return loss	dB	UPC	≥50
		APC	≥60
Working Wavelength	Nm	--	1310&1550
Working Broadband	Nm	--	1260~1640
Working Temperature	°C	--	-40~+75
Storage Temperature	°C	--	-40~+85
Vibration loss	dB	10-55Hz, 2hours	≤0.2
Drop loss	dB	1.5M, 5 times drops	≤0.2
Maximum Power	MW	--	500
3D standard	--	Compliant	≥70%
3D standard	--	100% comply with 3D standard	Option*

5. Product Picture and Dimension

FC	
Picture	
Dimension	

SC	
Picture	
Dimension	 <p>Technical drawing of an SC connector showing side and front views with dimensions:</p> <ul style="list-style-type: none">Side view dimensions: 8.95 ± 0.05, $\phi 2.5$, 31.7 ± 0.1, 36 ± 0.2, 2.1 ± 0.05, 12.6 ± 0.1.Front view dimensions: 9.4 ± 0.1, 1.7 ± 0.1.
ST	
Picture	
Dimension	 <p>Technical drawing of an ST connector showing side and front views with dimensions:</p> <ul style="list-style-type: none">Side view dimensions: $\phi 4.6 \pm 0.1$, $\phi 2.5$, 29 ± 0.15, 37 ± 0.2, 1.3 ± 0.1, $\phi 6.9 \pm 0.05$, 8.3 ± 0.15.Front view shows a circular connector profile.

LC type 1	
Picture	
Dimension	 <p>Technical drawing of LC type 1 attenuator showing side and front views with dimensions:</p> <ul style="list-style-type: none">Side view dimensions: $\varnothing 1.25$, 28.5 ± 0.1, 30.4 ± 0.15, $10.2^{+0.1}_0$, 12 ± 0.15.Front view dimensions: $6.3^{+0.1}_0$, 4.47 ± 0.05, 4.47 ± 0.05.
LC type 2	
Picture	
Dimension	 <p>Technical drawing of LC type 2 attenuator showing side and front views with dimensions:</p> <ul style="list-style-type: none">Side view dimensions: $\varnothing 1.25$, 25 ± 0.15, 11.3 ± 0.1, 9.5 ± 0.05.Front view dimensions: 5.9 ± 0.05, 4.47 ± 0.05, 4.47 ± 0.05.

MU	
Picture	
Dimension	 <p>Technical drawings of the attenuator showing dimensions in millimeters:</p> <ul style="list-style-type: none"> Side view dimensions: $\phi 1.25$, 30 ± 0.15, 28.9 ± 0.1, 6.1 ± 0.1. Front view dimensions: 5.6 ± 0.1, 4.4 ± 0.1, 6.6 ± 0.1, 8.6 ± 0.1.

Packing Pictures

<p>Build Out Attenuator</p> <p>LC/UPC 3dB</p> <table> <tr><td colspan="2">Serial NO:210415001</td></tr> <tr><td colspan="2">Attenuation</td></tr> <tr><td>1310nm</td><td>3.17</td></tr> <tr><td>1550nm</td><td>3.08</td></tr> <tr><td colspan="2">Reflectance</td></tr> <tr><td>1310nm</td><td>52.8</td></tr> <tr><td>1550nm</td><td>52.9</td></tr> </table>	Serial NO:210415001		Attenuation		1310nm	3.17	1550nm	3.08	Reflectance		1310nm	52.8	1550nm	52.9	<p>Build Out Attenuator</p> <p>SC/UPC 3dB</p> <table> <tr><td colspan="2">Serial NO:210415001</td></tr> <tr><td colspan="2">Attenuation</td></tr> <tr><td>1310nm</td><td>3.24</td></tr> <tr><td>1550nm</td><td>3.19</td></tr> <tr><td colspan="2">Reflectance</td></tr> <tr><td>1310nm</td><td>51.5</td></tr> <tr><td>1550nm</td><td>51.7</td></tr> </table>	Serial NO:210415001		Attenuation		1310nm	3.24	1550nm	3.19	Reflectance		1310nm	51.5	1550nm	51.7	<p>Build Out Attenuator</p> <p>FC/UPC 3dB</p> <table> <tr><td colspan="2">Serial NO:210415001</td></tr> <tr><td colspan="2">Attenuation</td></tr> <tr><td>1310nm</td><td>3.36</td></tr> <tr><td>1550nm</td><td>2.73</td></tr> <tr><td colspan="2">Reflectance</td></tr> <tr><td>1310nm</td><td>51.6</td></tr> <tr><td>1550nm</td><td>51.9</td></tr> </table>	Serial NO:210415001		Attenuation		1310nm	3.36	1550nm	2.73	Reflectance		1310nm	51.6	1550nm	51.9
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100PCS

PO-CP202-1040566

Attenuation	
1310nm	2.31
1550nm	1.79
Reflectance	
1310nm	62.2
1550nm	62.5

PO-CP202-1040566

Attenuation	
1310nm	63.4
1550nm	63.6
Reflectance	
1310nm	63.6
1550nm	64.4

PO-CP202-1040566

Attenuation	
1310nm	64.5
1550nm	64.5
Reflectance	
1310nm	64.5
1550nm	64.5