

FA140 Series
Single mode
MU PLUG TYPE ATTENUATOR
TECHNICAL SPECIFICATIONS



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1 SCOPE

These specifications apply to the FA140 series single mode MU plug type attenuator supplied by SEIKOH GIKEN Co., Ltd.

2 PART NUMBER

Part number of the attenuator is shown in Table 1.

Table 1 Part Number

MODEL Number	TYPE Number
FA140	- 0 1 - H P



Attenuation Value	
01	1 dB
02	2 dB
03	3 dB
04	4 dB
05	5 dB
06	6 dB
07	7 dB
08	8 dB
09	9 dB
10	10 dB
11	11 dB
12	12 dB
13	13 dB
14	14 dB
15	15 dB
16	16 dB
17	17 dB
18	18 dB
19	19 dB
20	20 dB

3 GENERAL SPECIFICATIONS

3.1 Parts and Materials

Parts and materials are shown in Table 2.

Table 2 Parts and Materials

Item	Part Name	Qty	Material	Notes
①	Grip	1	Zinc Die-cast	Nickel plating
②	Housing	1	Plastics	Brown, Flammability UL94V-0
③	Ferrule	1	Zirconia	-
④	Flange	1	Stainless steel	-
⑤	Slit sleeve	1	Zirconia	-
⑥	Sleeve holder	1	Brass	Nickel plating
⑦	Label	1	-	-
⑧	Cap for the front side	1	Plastics	Blue, Flammability UL94V-0
⑨	Cap for the rear side	1	Plastics	Blue, Flammability UL94V-0

Note : Item on Table 2 complies with the reference number on Figure 3 to 5.

3.2 Physical Dimensions

Figure 3 shows the FA140 series attenuator.

- The front side / rear side of this attenuator are compatible with JIS C 5983 F14 type connectors, and IEC 61754-6 Type MU connector family.
- The front side of this attenuator is compatible with NTT MU-P type plug. The rear side of this attenuator is mated with NTT MUJ-P type plug.

3.3 General Tolerances

Permissible deviation in dimensions without tolerance indication is in accordance with ISO 2768-m (JIS B 0405-m), as shown in Table 3.

Table 3 General tolerance (ISO 2768-m)

Basic size step [mm]		Permissible deviation [mm]
Over	Under	
0.5	3	±0.1
3	6	±0.1
6	30	±0.2
30	120	±0.3

3.4 Attenuation Value

Attenuation value of the attenuator and the measurement conditions are shown in Table 4. Figure 1 shows the measurement system.

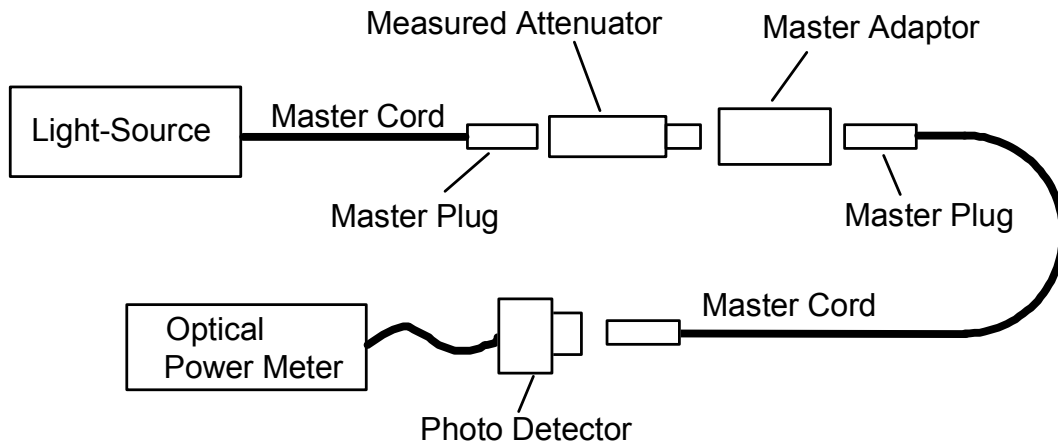


Figure 1 Attenuation value measurement system

Table 4 Attenuation value and the measurement conditions

Type number	-01-HP	-02-HP	-03-HP	-04-HP	-05-HP
Attenuation value	1±0.5dB	2±0.5dB	3±1.0dB	4±1.0dB	5±1.0dB
Conditions	Light-source	LD			
	Wavelength	1310 and 1550 nm			
	Ambient temperature	25 degrees C			
Type number	-06-HP	-07-HP	-08-HP	-09-HP	-10-HP
Attenuation value	6±1.0dB	7±1.0dB	8±1.0dB	9±1.0dB	10±1.0dB
Conditions	Light-source	LD			
	Wavelength	1310 and 1550 nm			
	Ambient temperature	25 degrees C			
Type number	-11-HP	-12-HP	-13-HP	-14-HP	-15-HP
Attenuation value	11±1.1dB	12±1.2dB	13±1.3dB	14±1.4dB	15±1.5dB
Conditions	Light-source	LD			
	Wavelength	1310 and 1550 nm			
	Ambient temperature	25 degrees C			
Type number	-16-HP	-17-HP	-18-HP	-19-HP	-20-HP
Attenuation value	16±1.6dB	17±1.7dB	18±1.8dB	19±1.9dB	20±2.0dB
Conditions	Light-source	LD			
	Wavelength	1310 and 1550 nm			
	Ambient temperature	25 degrees C			

3.5 Return Loss

Return loss of the attenuator and the measurement conditions are shown in Table 5. Figure 2 shows the measurement system.

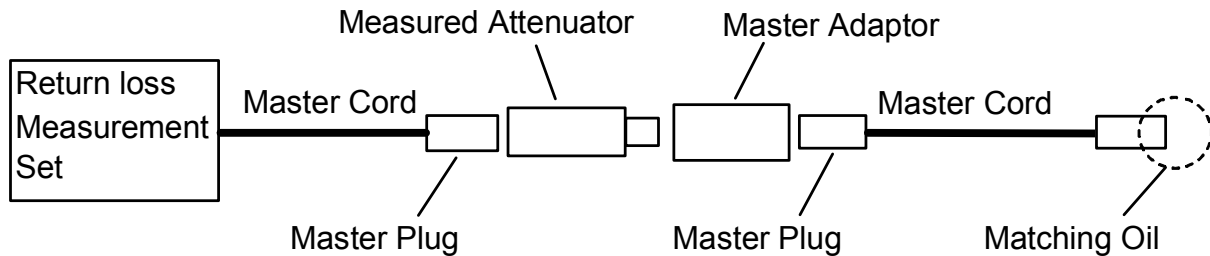


Figure 2 Return loss measurement system

Table 5 Return loss and the measurement conditions

Return loss		50 dB or more
Conditions	Light-source	LD
	Wavelength	1310 nm
	Ambient temperature	25 degrees C

3.6 Operating Conditions

Operating conditions of the attenuator are shown in Table 6.

Table 6 Operating conditions

Item	Condition
Wavelength	1310 and 1550 nm
Optical fiber	SM 9 /125
Operating temperature range	- 25 to +70 degrees C without condensation

3.7 Appearance

There should be no burr, peeling of plating or scratches that affect the product.

4 PACKING

The product is packed to prevent damage during shipment.

5 IDENTIFICATION

Identification label should indicate the part number and the lot number of the product(s) and should be permanently attached to the packing bag.

6 HANDLING AND CARE

6.1 Conditions of Storage

Keep the product, in the packing bag, at the following conditions for its storage.

- Storage temperature: -40 to +85 degrees C
- Storage humidity: 0 to 85%RH, non-condensing

6.2 Precautions for Use

Contamination, oil, sweat and others debris on the ferrule end face may influence the performance of the product. If contamination is on the ferrule end face, wipe the end face with the end face cleaner.

6.3 Disposal

When discarding this product, please follow the regulations of your own country.

S07-H001-02E
FA140 Series

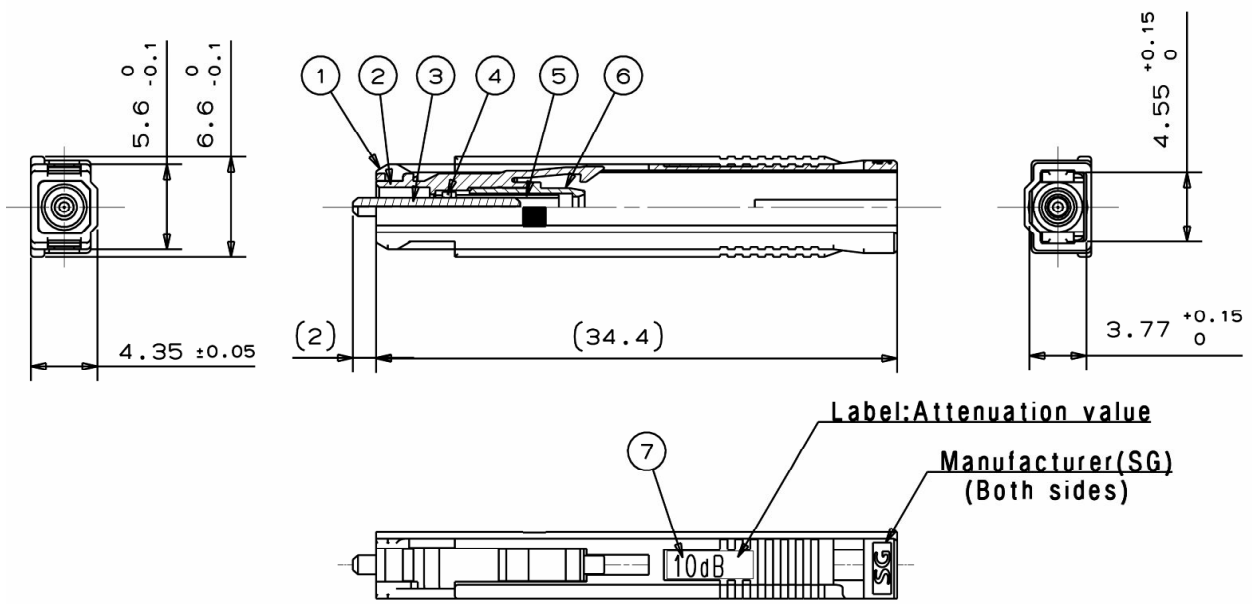


Figure 3 FA140 Series Attenuator

Unit: mm

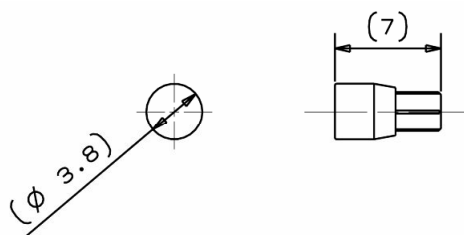


Figure 4 ⑧ Cap for the front side

Unit: mm

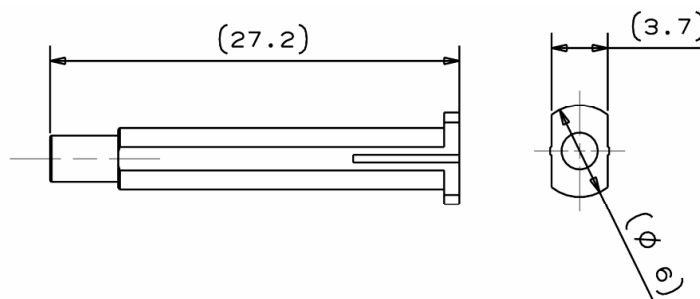


Figure 5 ⑨ Cap for the rear side

Unit: mm