

GS-SC Series

SC CONNECTOR PLUG

TECHNICAL SPECIFICATIONS



Fiber Optic Products Division

Seikoh Giken Hangzhou Co., Ltd.

526 Binkang Road Binjiang District, Hangzhou, Zhejiang,

China 310052, P.R. China

TEL:+86-571-8777-4098 / FAX:+86-571-8777-4099

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Please address any questions, comments, and suggestions to:

SEIKOH GIKEN USA, Inc.

4405 International Blvd., Suite B109

Norcross, GA 30093 U.S.A.

TEL: +1-770-279-6602

FAX: +1-770-279-8839

SEIKOH GIKEN Europe GmbH

Siemensstrasse 9

D-63263 Neu-Isenburg, Germany

TEL: +49-6102-297-701

FAX: +49-6102-297-750

SEIKOH GIKEN Co.,Ltd.

Fiber Optic Products Division

296-1, MATSUHIDAI, MATSUDO-SHI,

CHIBA, 270-2214 JAPAN.

TEL: +81-47-388-6111 FAX: +81-47-388-4477

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1 SCOPE

These specifications apply to the GS SC series SC connector plug for $\Phi 0.9\text{mm}$ buffered fiber and $\Phi 2\text{mm}$ cord supplied by SEIKOH GIKEN Co., Ltd.

2 PART NUMBER

Part number of the connector plug is shown in Table 1.

Table 1 Part Number

SC/PC 0.9mm SM

| | | | | | | | |
|---------------|-----------------------------------|----------|----------|------------|----------|------------------|-------------------|
| SSC-PE1G | | <u>5</u> | <u>1</u> | <u>125</u> | <u>1</u> | <u>A</u> | 306G |
| Boot Color | | | | | | Cap | |
| 1 | Black | | | | | A | Black Ferrule Cap |
| 2 | Red | | | | | | |
| 5 | Blue | | | | | Marking | |
| | | | | | | 1 | SG |
| Boot I.D.(mm) | | | | | | Ferrule I.D.(um) | |
| 1 | For Φ0.9mm buffered fiber(Rubber) | | | | | 125 | Φ 125 |

SC/APC (Conical) 0.9mm SM

| | | | | | | | | | | | | | | | | | | | | | |
|-----------|--|--|--|--|--|--|--|--|--|----------|--|----------|--|------------|--|----------|--|----------|--|------|--|
| SSC-PNE1G | | | | | | | | | | <u>8</u> | | <u>1</u> | | <u>125</u> | | <u>1</u> | | <u>B</u> | | 306G | |
| | | | | | | | | | | | | | | | | | | | | | |
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SC/PC 0.9mm MM

| | | | | | | |
|------------------|-----------------|-----------------|-------------------|-----------------|-----------------|-------------|
| SSC-PBE1G | <u>C</u> | <u>1</u> | <u>126</u> | <u>1</u> | <u>A</u> | 306G |
|------------------|-----------------|-----------------|-------------------|-----------------|-----------------|-------------|

| | | | | | | | |
|---------------|---------|--|--|---------|--|--|--|
| Housing Color | | Cap | | Marking | | | |
| B | Beige | | | | | | |
| Q | Aqua | | | | | | |
| Boot Color | | Ferrule I.D.(um) | | 1 | | | |
| 0 | No Boot | | | | | | |
| 1 | Black | | | SG | | | |
| 2 | Red | | | | | | |
| 6 | Magenta | | | | | | |
| C | White | Boot I.D.(mm) | | 1 | | | |
| | | | | | | | |
| | | For $\Phi 0.9$ mm buffered fiber(Rubber) | | | | | |

SC/PC 2mm SM

| | | | | | | |
|-----------------|-----------------|-----------------|-------------------|-----------------|-----------------|-------------|
| SSC-PE2G | <u>5</u> | <u>B</u> | <u>125</u> | <u>1</u> | <u>A</u> | 306G |
|-----------------|-----------------|-----------------|-------------------|-----------------|-----------------|-------------|

| | | | | | | | | | | | | | | | | | |
|--|----------------------|------------|-------|---|-------|---|-----|---|------|---|-------|--|--|--|--|-----|--|
| <table><tr><td colspan="2">Boot Color</td></tr><tr><td>1</td><td>Black</td></tr><tr><td>2</td><td>Red</td></tr><tr><td>5</td><td>Blue</td></tr><tr><td>C</td><td>White</td></tr></table> | | Boot Color | | 1 | Black | 2 | Red | 5 | Blue | C | White | | | | | Cap | |
| | | Boot Color | | | | | | | | | | | | | | | |
| | | 1 | Black | | | | | | | | | | | | | | |
| | | 2 | Red | | | | | | | | | | | | | | |
| | | 5 | Blue | | | | | | | | | | | | | | |
| C | White | | | | | | | | | | | | | | | | |
| A | Black Ferrule Cap | | | | | | | | | | | | | | | | |
| Marking | | | | | | | | | | | | | | | | | |
| 1 | SG | | | | | | | | | | | | | | | | |
| Boot I.D.(mm) | | | | | | | | | | | | | | | | | |
| B | For $\Phi 2$ mm Cord | | | | | | | | | | | | | | | | |

| | |
|------------------|------------|
| Ferrule I.D.(um) | |
| 125 | $\Phi 125$ |

SC/APC (Conical) 2mm SM

| | | | | | | |
|------------------|-----------------|-----------------|-------------------|-----------------|-----------------|-------------|
| SSC-PNE2G | <u>8</u> | <u>B</u> | <u>125</u> | <u>1</u> | <u>B</u> | 306G |
|------------------|-----------------|-----------------|-------------------|-----------------|-----------------|-------------|

| | | | | | | | | | | | | | | | |
|--|-------------------|------------|------------------|---------|-------|---|-----|---|-------|--|--|--|--|-----|--|
| <table><tr><td colspan="2">Boot Color</td></tr><tr><td>1</td><td>Black</td></tr><tr><td>2</td><td>Red</td></tr><tr><td>8</td><td>Green</td></tr></table> | | Boot Color | | 1 | Black | 2 | Red | 8 | Green | | | | | Cap | |
| | | Boot Color | | | | | | | | | | | | | |
| | | 1 | Black | | | | | | | | | | | | |
| | | 2 | Red | | | | | | | | | | | | |
| 8 | Green | | | | | | | | | | | | | | |
| B | Green Ferrule Cap | | | | | | | | | | | | | | |
| Marking | | | | | | | | | | | | | | | |
| 1 | SG | | | | | | | | | | | | | | |
| Boot I.D.(mm) | | | Ferrule I.D.(um) | | | | | | | | | | | | |
| B | For Φ2mm Cord | | 125 | Φ 125 | | | | | | | | | | | |
| | | | 12F | Φ 125.5 | | | | | | | | | | | |

SC/PC 2mm MM

| | | | | | | |
|------------------|-----------------|-----------------|-------------------|-----------------|-----------------|-------------|
| SSC-PBE2G | <u>C</u> | <u>B</u> | <u>126</u> | <u>1</u> | <u>A</u> | 306G |
|------------------|-----------------|-----------------|-------------------|-----------------|-----------------|-------------|

| | |
|---------------|-------|
| Housing Color | |
| B | Beige |
| Q | Aqua |

| | |
|-----|-------------------|
| Cap | |
| A | Black Ferrule Cap |

| | |
|---------|----|
| Marking | |
| 1 | SG |

| | |
|------------|---------|
| Boot Color | |
| 1 | Black |
| 2 | Red |
| 6 | Magenta |
| A | Beige |
| C | White |

| | |
|------------------|-------|
| Ferrule I.D.(um) | |
| 126 | Φ 126 |

| | |
|---------------|---------------|
| Boot I.D.(mm) | |
| B | For Φ2mm Cord |

SC/PC 3mm SM

| | | | | | | |
|-----------------|-----------------|-----------------|-------------------|-----------------|-----------------|-------------|
| SSC-PE3G | <u>5</u> | <u>C</u> | <u>125</u> | <u>1</u> | <u>A</u> | 306G |
|-----------------|-----------------|-----------------|-------------------|-----------------|-----------------|-------------|

| | | | | | | | | | | | | |
|--|---------------------|------------|------------------|------------|------|---|-------|--|--|--|-----|--|
| <table><tr><td colspan="2">Boot Color</td></tr><tr><td>5</td><td>Blue</td></tr><tr><td>C</td><td>White</td></tr></table> | | Boot Color | | 5 | Blue | C | White | | | | Cap | |
| | | Boot Color | | | | | | | | | | |
| | | 5 | Blue | | | | | | | | | |
| | | C | White | | | | | | | | | |
| A | Black Ferrule Cap | | | | | | | | | | | |
| Marking | | | | | | | | | | | | |
| 1 | SG | | | | | | | | | | | |
| Boot I.D.(mm) | | | Ferrule I.D.(um) | | | | | | | | | |
| C | For Φ 3mm Cord | | 125 | Φ 125 | | | | | | | | |

SC/APC (Conical) 3mm SM

| | | | | | | |
|------------------|-----------------|-----------------|-------------------|-----------------|-----------------|-------------|
| SSC-PNE3G | <u>8</u> | <u>C</u> | <u>125</u> | <u>1</u> | <u>B</u> | 306G |
|------------------|-----------------|-----------------|-------------------|-----------------|-----------------|-------------|

| | | | | | | | | | | | | | | | | | |
|---|-------------------|---------------|-------|---|---------------|---|--|------------------|--|-----|-------------------|--|---------|---------|--|---|----|
| <table><tr><td colspan="2">Boot Color</td></tr><tr><td>8</td><td>Green</td></tr></table> | | Boot Color | | 8 | Green | <table><tr><td colspan="2">Cap</td></tr><tr><td>B</td><td>Green Ferrule Cap</td></tr></table> | | Cap | | B | Green Ferrule Cap | <table><tr><td colspan="2">Marking</td></tr><tr><td>1</td><td>SG</td></tr></table> | | Marking | | 1 | SG |
| | | Boot Color | | | | | | | | | | | | | | | |
| | | 8 | Green | | | | | | | | | | | | | | |
| Cap | | | | | | | | | | | | | | | | | |
| B | Green Ferrule Cap | | | | | | | | | | | | | | | | |
| Marking | | | | | | | | | | | | | | | | | |
| 1 | SG | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| <table><tr><td colspan="2">Boot I.D.(mm)</td></tr><tr><td>C</td><td>For Φ3mm Cord</td></tr></table> | | Boot I.D.(mm) | | C | For Φ3mm Cord | <table><tr><td colspan="2">Ferrule I.D.(um)</td></tr><tr><td>125</td><td>Φ 125</td></tr><tr><td>12F</td><td>Φ 125.5</td></tr></table> | | Ferrule I.D.(um) | | 125 | Φ 125 | 12F | Φ 125.5 | | | | |
| Boot I.D.(mm) | | | | | | | | | | | | | | | | | |
| C | For Φ3mm Cord | | | | | | | | | | | | | | | | |
| Ferrule I.D.(um) | | | | | | | | | | | | | | | | | |
| 125 | Φ 125 | | | | | | | | | | | | | | | | |
| 12F | Φ 125.5 | | | | | | | | | | | | | | | | |

SC/PC 3mm MM

| | | | | | | |
|------------------|-----------------|-----------------|-------------------|-----------------|-----------------|-------------|
| SSC-PBE3G | <u>C</u> | <u>C</u> | <u>126</u> | <u>1</u> | <u>A</u> | 306G |
|------------------|-----------------|-----------------|-------------------|-----------------|-----------------|-------------|

| | | | | | |
|---------------|---------------|-----|-------|------------------|-------------------|
| Housing Color | | | | Cap | |
| B | Beige | | | A | Black Ferrule Cap |
| | | | | | |
| Boot Color | | | | Marking | |
| A | Beige | | | 1 | SG |
| | | | | | |
| Boot I.D.(mm) | | | | Ferrule I.D.(um) | |
| C | For Φ3mm Cord | 126 | Φ 126 | | |

Please contact us for availability of other specifications.

3 GENERAL SPECIFICATIONS

3.1 Parts and Materials

Parts and materials are shown in Table 2, 3.

Table 2 Parts and Materials

| Item | Part Name | Qty | Material | Notes |
|------|---------------------------------|-----|-----------------|--|
| ①-1 | Main Body | 1 | See Table 3 | For SC/PC |
| ①-2 | | | | For SC/APC |
| ② | Grip | 1 | PBT GF | Flammability UL94 V-0 |
| ③-1 | Crimping Ring ^{Note 2} | 1 | Aluminum Alloy | for ø 2 mm cord |
| ③-2 | | | | for ø 3 mm cord |
| ④-1 | Boot | 1 | Silicone rubber | for ø 0.9 mm buffered fiber rubber boot, Flammability UL94 V-0 |
| ④-2 | | | TPE | for ø 2 mm cord Equivalent to Flammability UL94 V-0 |
| ④-3 | | | TPE | for ø 3 mm cord Equivalent to Flammability UL94 V-0 |
| ⑤ | Cap | 1 | PP | Ferrule Cap |

Notes: 1 Item on Table 2 corresponds to the item reference number on Figure 1 to 15.

2 ③Crimping Ring is not included for ø 0.9 mm buffered fiber type.

Table 3 Parts and Materials of Main Body

| Item | Part Name | Qty | Material | Notes |
|------|----------------------|-----|-----------------|------------------------------|
| ⑦ | Capillary | 1 | Zirconia | - |
| ⑧ | Flange | 1 | Brass | Nickel Plating |
| ⑨ | Plug Frame | 1 | PBT GF | White, Flammability UL94 V-0 |
| ⑩ | Spring | 1 | Stainless Steel | - |
| ⑪ | Stop Ring | 1 | Brass | Nickel Plating |
| ⑫ | Heat-shrinkable Tube | 1 | EVA | Black, Flammability VW-1 |

Note: Item on Table 3 corresponds to the item reference number on Figure 7 and 8.

3.2 Physical Dimensions

Figure 1 to 6 shows the SC-0.9 and SC-2.0 and SC-3.0 series connector plug

Figure 7 and 8 shows the main body

Figure 9 to 15 shows the dimensions of the parts

- In accordance with IEC 61754-4 Type SC connector family.
- In accordance with JIS C 5973 F04 Type connectors.

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 5.

Table 5 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 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

For storage of the product, keep in the packing bag and keep away from corrosive gas, high-temperature and humidity, extreme-low temperature and direct sunlight.

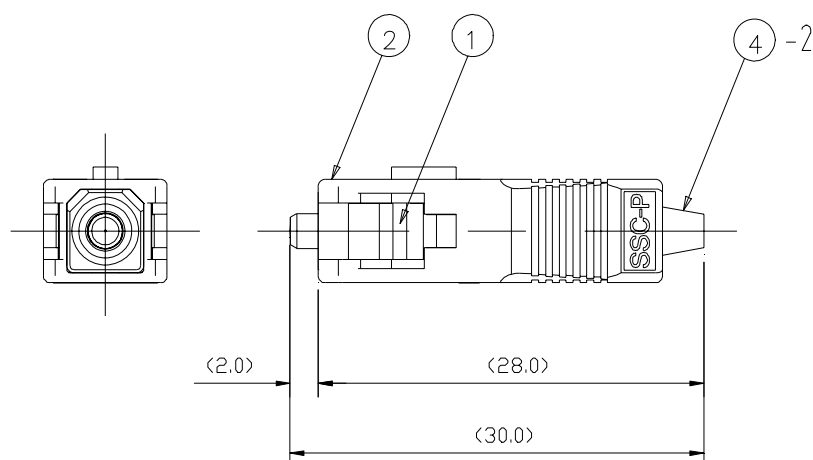
6.2 Precautions for Use

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.

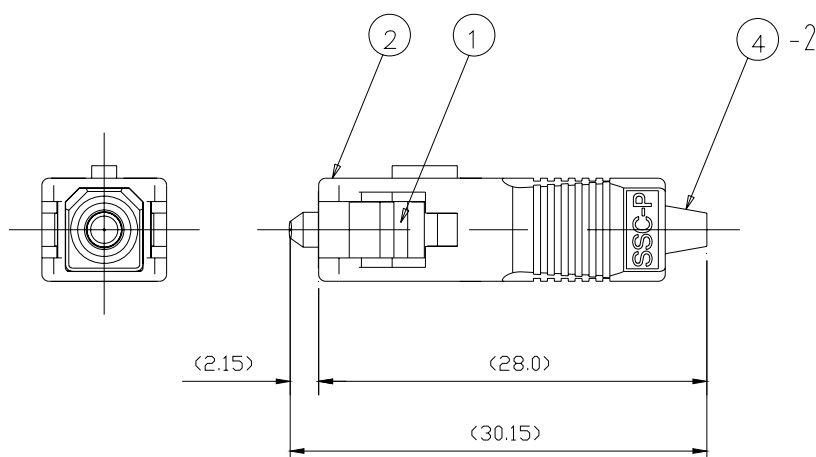
7 FIGURE



Unit: mm

Figure 1 GS-SC/PC Series Connector Plug (for \varnothing 0.9 mm buffered fiber, rubber boot)

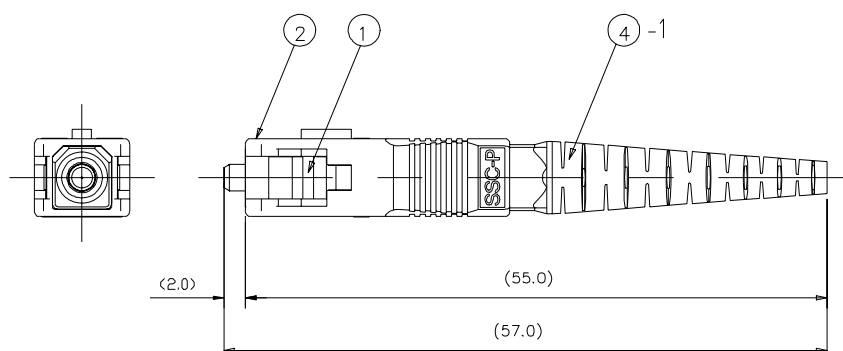
- Notes: 1 This drawing shows the tentatively assembled condition.
On practical shipment of GS-SC/PC connector plug, this tentative assembly is not available.
- 2 This drawing does not include the cap.



Unit: mm

Figure 2 GS-SC/APC Series Connector Plug (for \varnothing 0.9 mm buffered fiber, rubber boot)

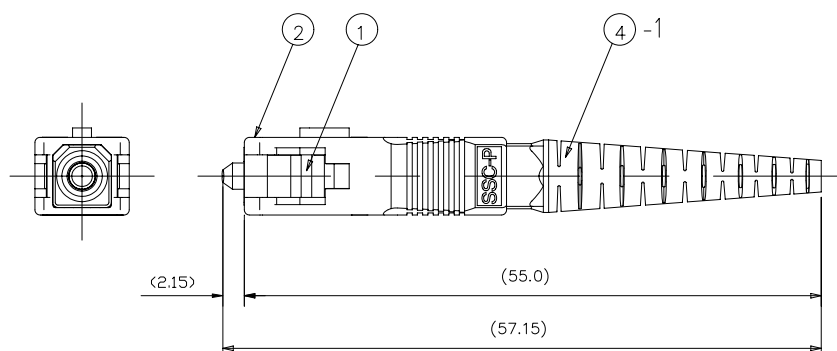
- Notes: 1 This drawing shows the tentatively assembled condition.
On practical shipment of GS-SC/APC connector plug, this tentative assembly is not available
- 2 This drawing does not include the cap.



Unit: mm

Figure 3 GS-SC/PC Series Connector Plug (for ø 2 mm cord)

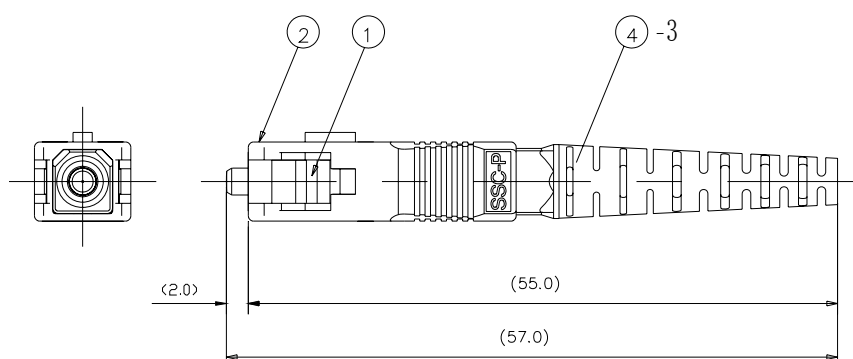
- Notes: 1 This drawing shows the tentatively assembled condition.
On practical shipment of GS-SC/PC connector plug, this tentative assembly is not available.
- 2 This drawing does not include the cap.



Unit: mm

Figure 4 GS-SC/APC Series Connector Plug (for ø 2 mm cord)

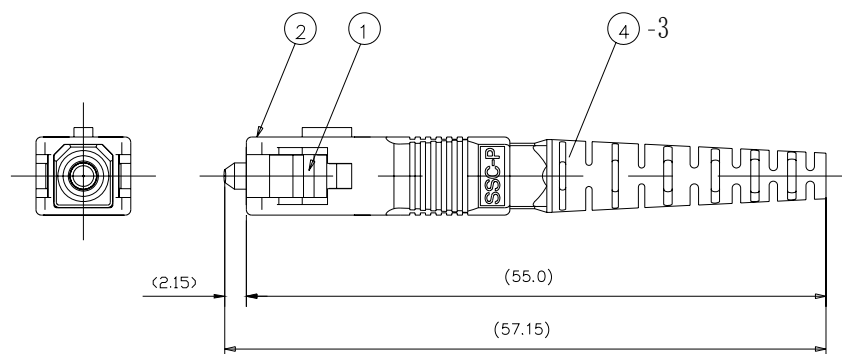
- Notes: 1 This drawing shows the tentatively assembled condition.
On practical shipment of GS-SC/APC connector plug, this tentative assembly is not available.
- 2 This drawing does not include the cap.



Unit: mm

Figure 5 GS-SC/PC Series Connector Plug (for ø 3 mm cord)

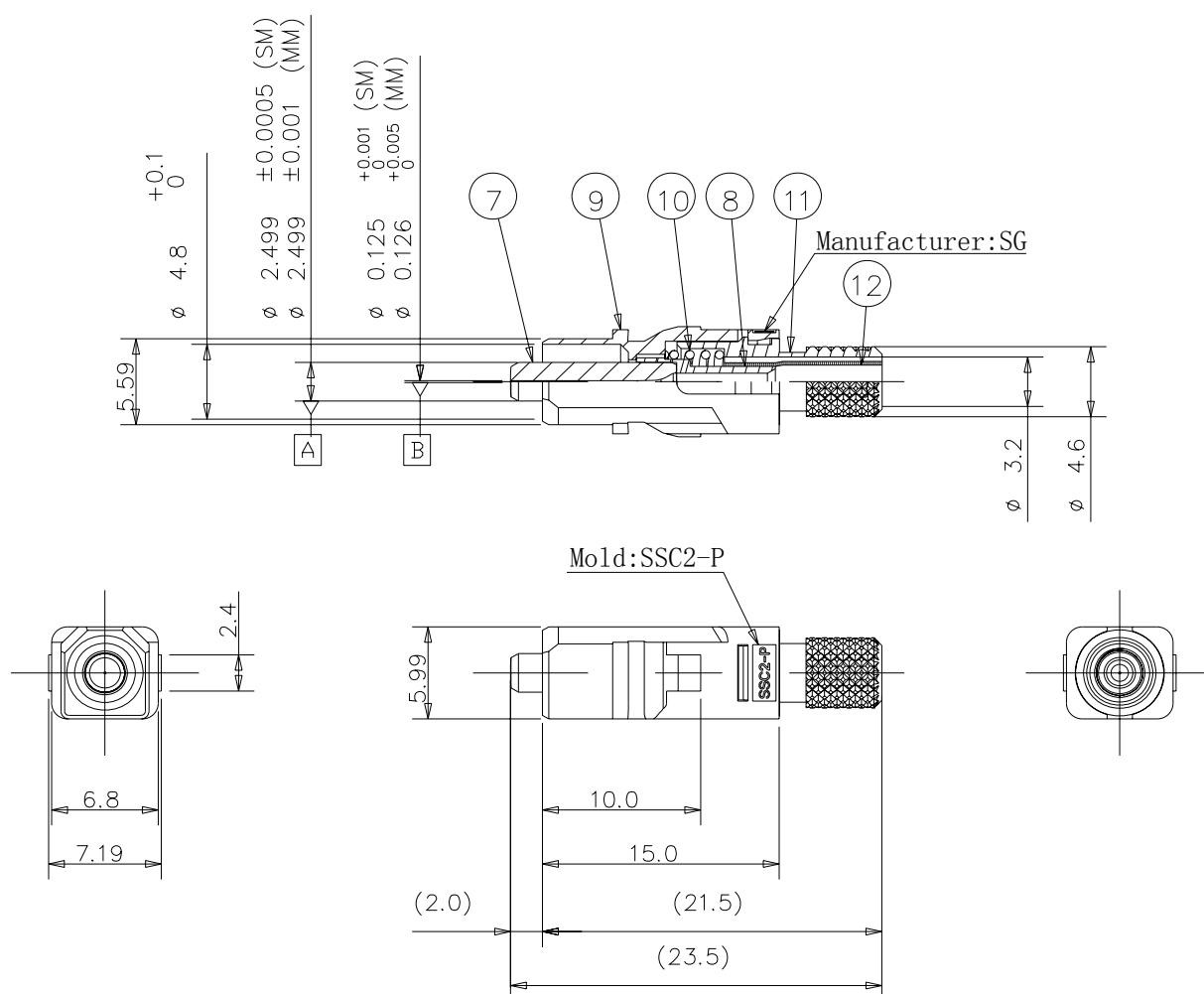
- Notes: 1 This drawing shows the tentatively assembled condition.
On practical shipment of GS-SC/PC connector plug, this tentative assembly is not available.
- 2 This drawing does not include the cap.



Unit: mm

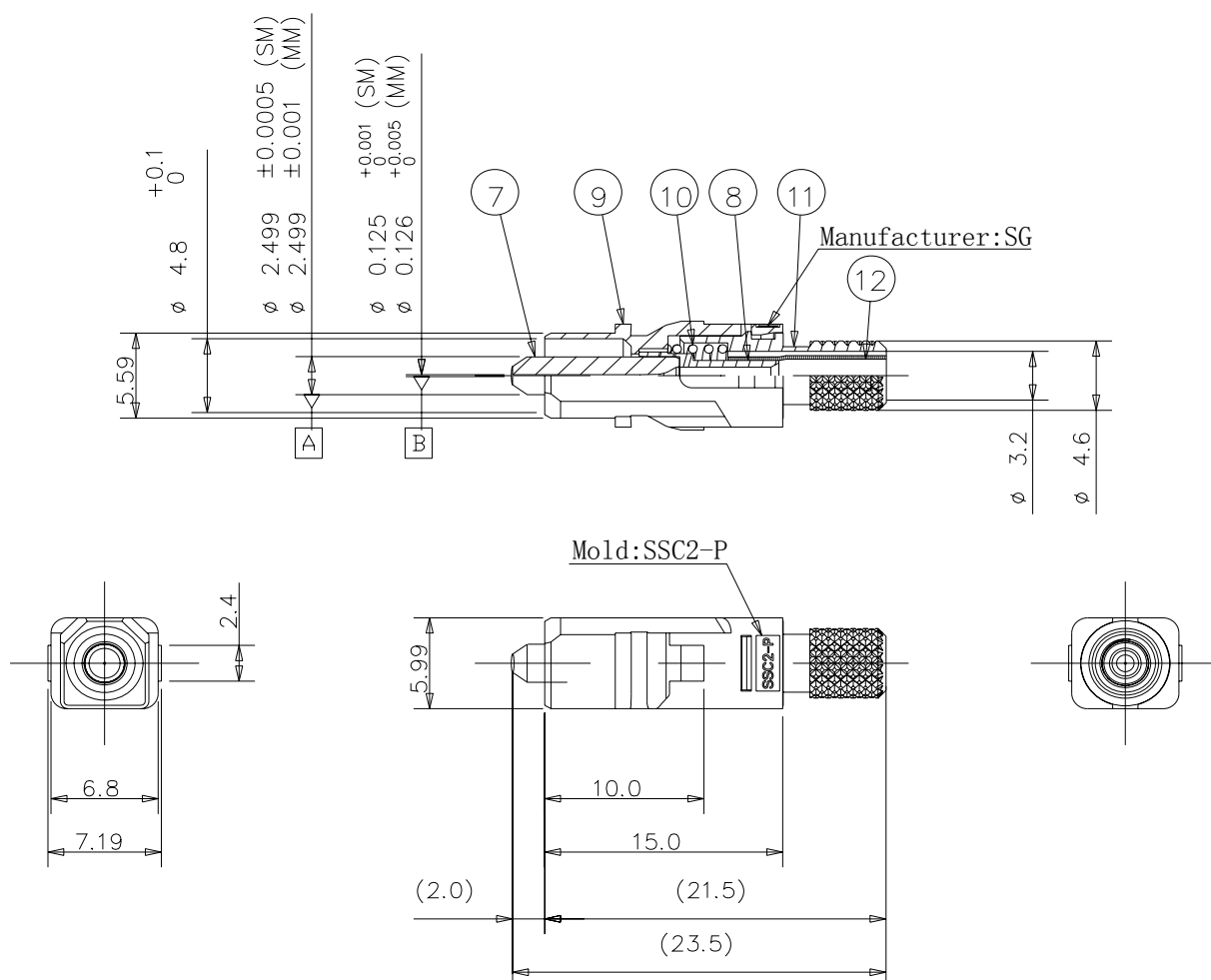
Figure 6 GS-SC/APC Series Connector Plug (for ø 3 mm cord)

- Notes: 1 This drawing shows the tentatively assembled condition.
On practical shipment of GS-SC/APC connector plug, this tentative assembly is not available.
- 2 This drawing does not include the cap.



Unit: mm

Figure 7 ①-1 Main Body(for SC/PC)



Unit: mm

Figure 8 ①-2 Main Body(for SC/APC)

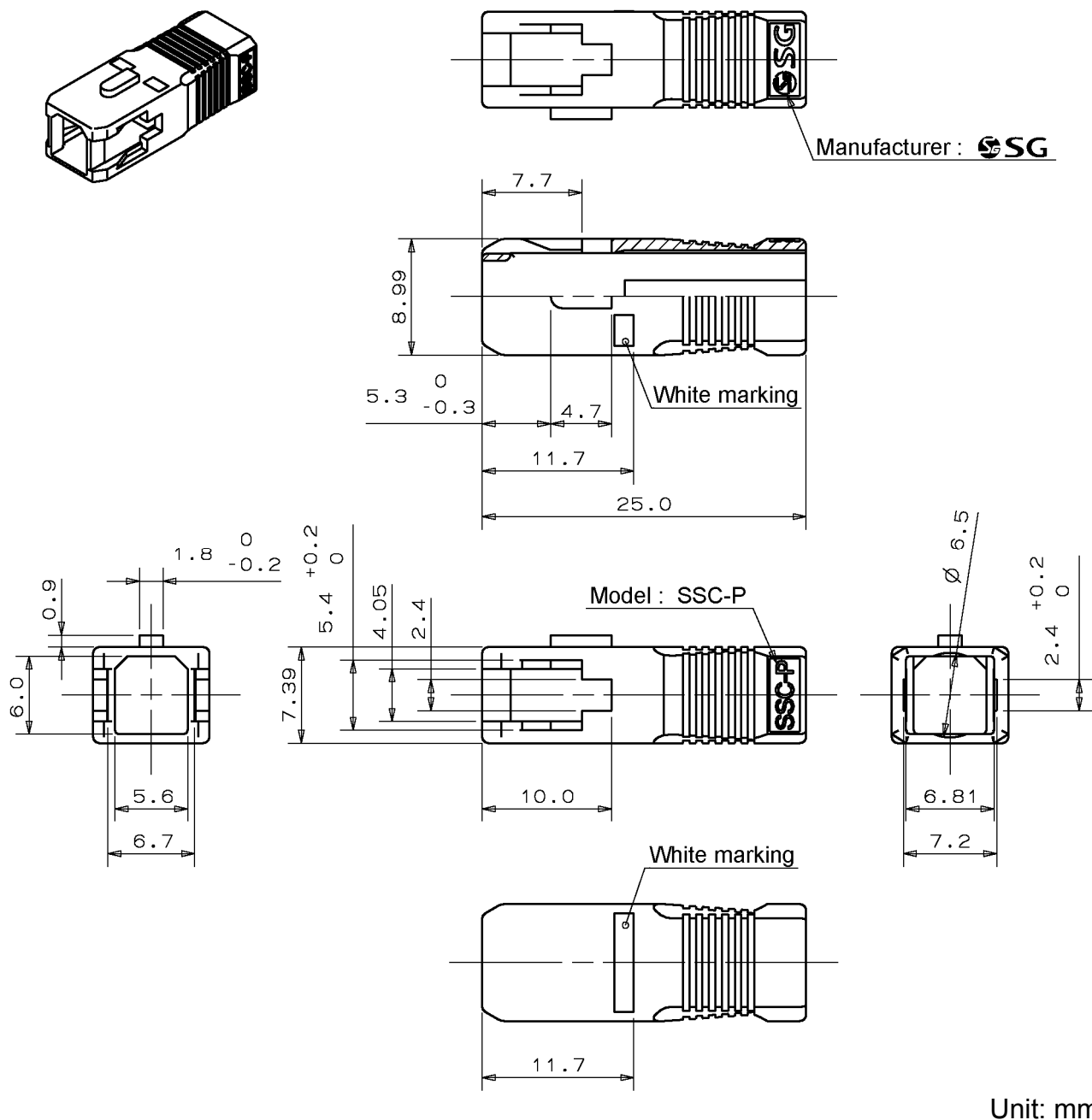
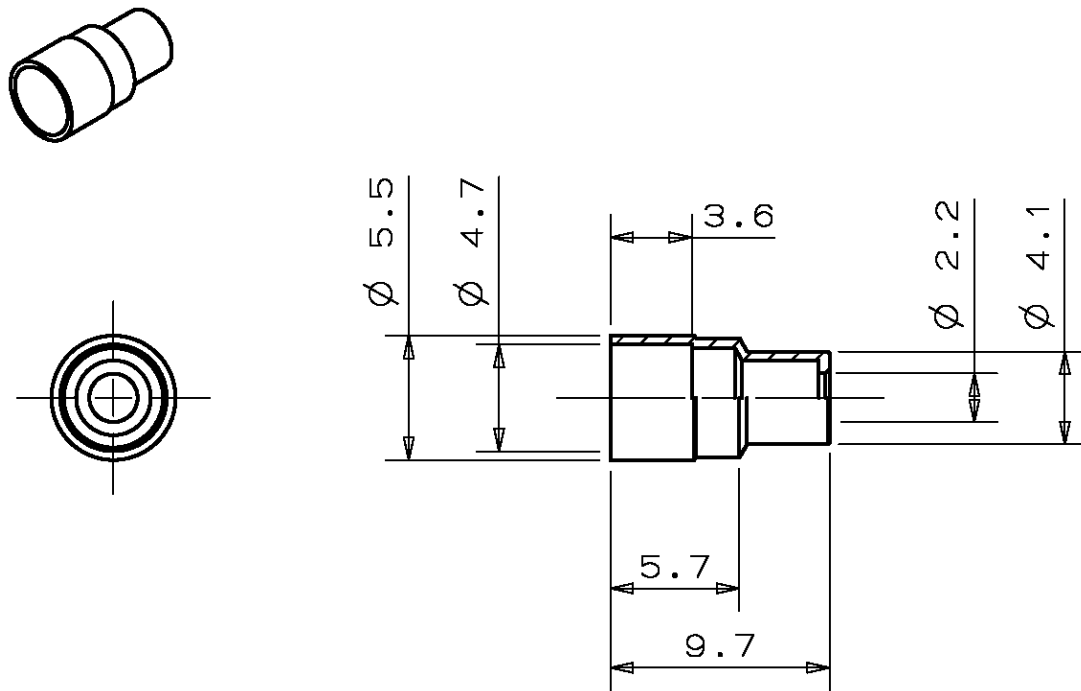
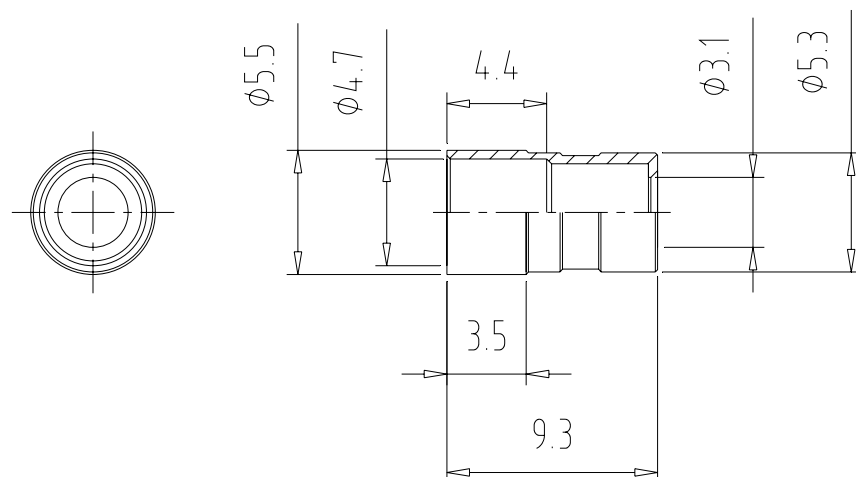


Figure 9 ②Grip



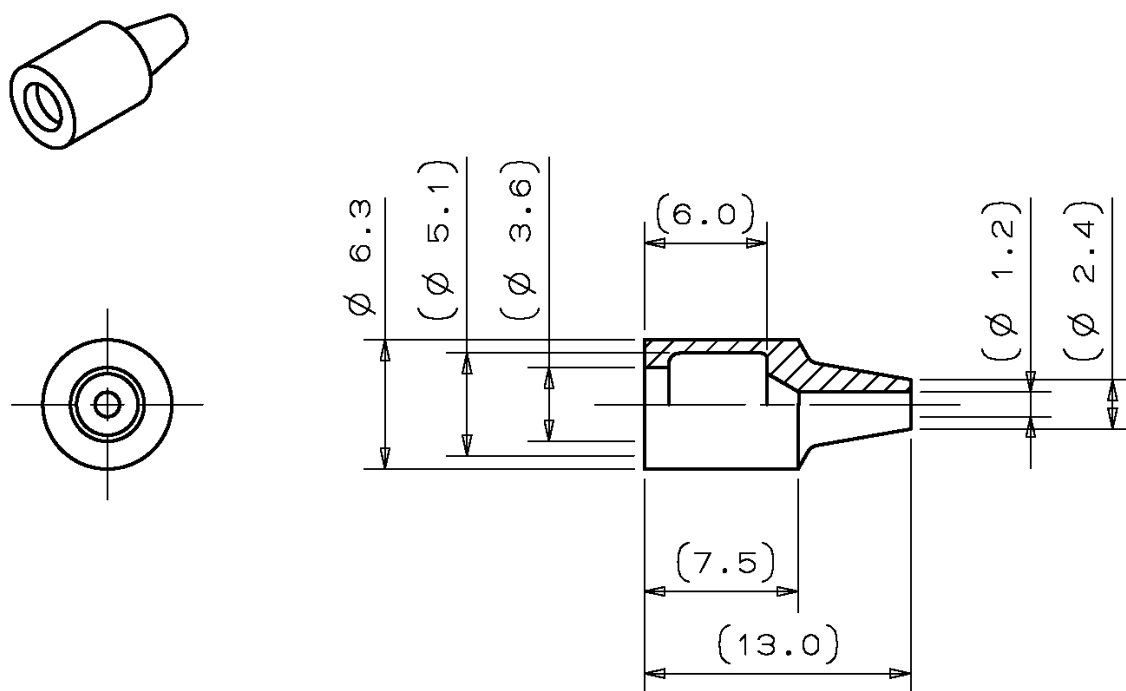
Unit: mm

Figure 10 ③-1 Crimping Ring (for $\phi 2$ mm cord)



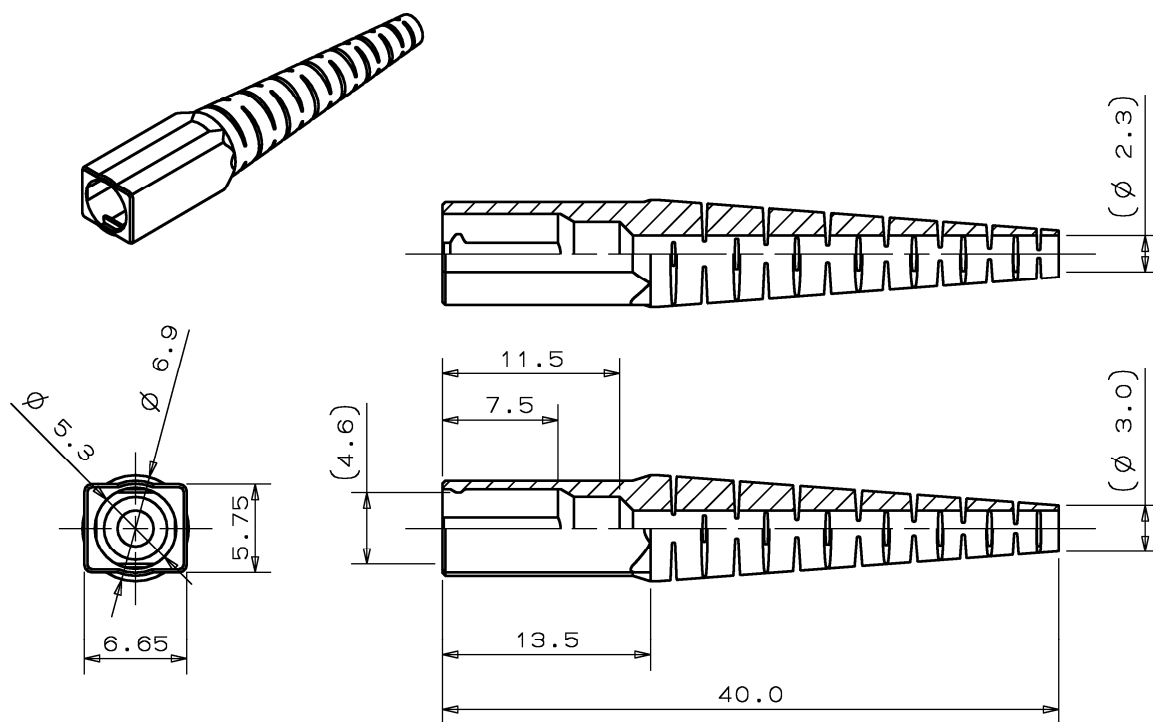
Unit: mm

Figure 11 ③-2 Crimping Ring (for $\phi 3$ mm cord)



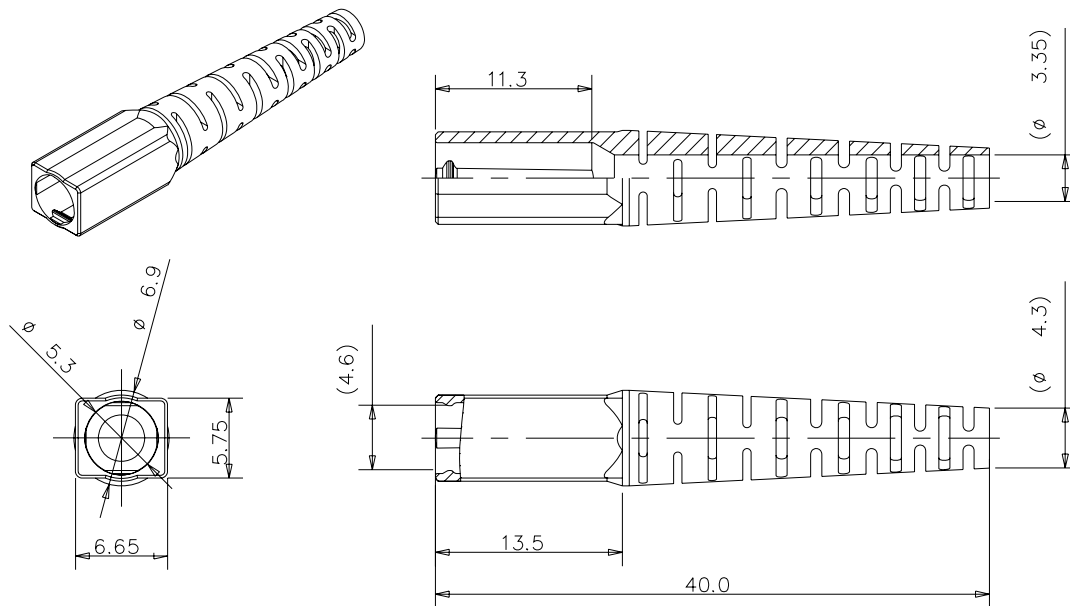
Unit: mm

Figure 12 ④-1 Boot (for \varnothing 0.9 mm buffered fiber, rubber boot)



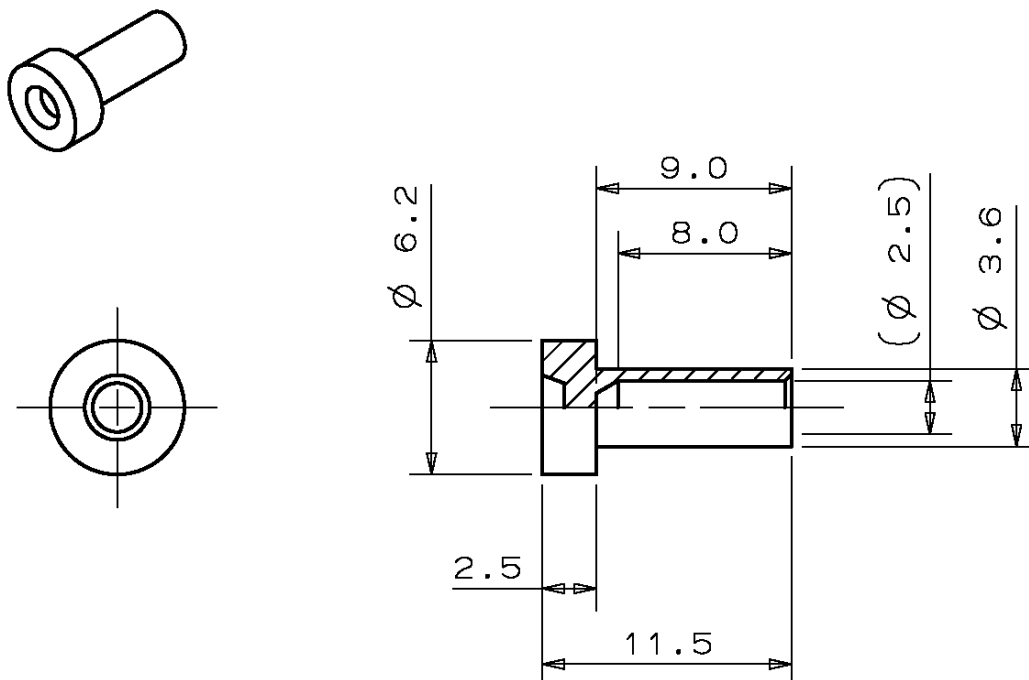
Unit: mm

Figure 13 ④-2 Boot (for \varnothing 2 mm cord)



Unit: mm

Figure 14 ④-3 Boot (for $\varnothing 3$ mm cord)



Unit: mm

Figure 15 ⑤Cap (Ferrule Cap)