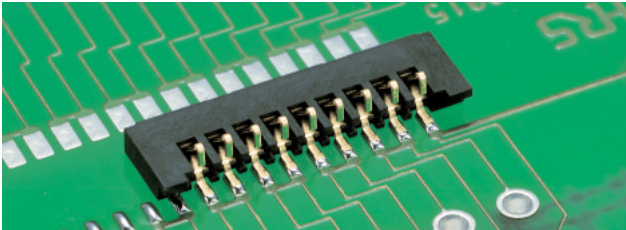
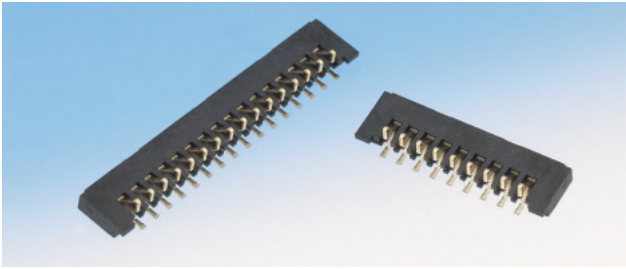
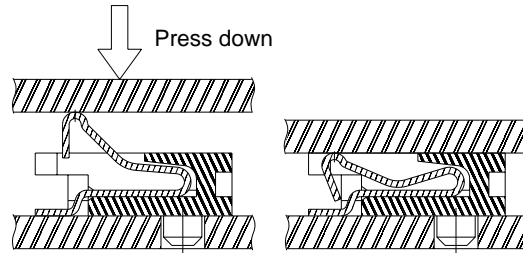


1.1mm Pitch Low Profile Compression Connectors

DF26 Series



Compression Connectors
-Mating height: 1.2mm and 1.7mm



Features

1. Low Profile

Connectors are available in heights : 1.2mm and 1.7mm.

2. Miniature, Space-Saving Design

The space-saving design of these connectors permits increase in the mounting density as compared to equivalent products.

3. One-Piece Connector

These connectors support cost reduction requirement since there is no need for a mating half connector.

This design also permits a reduction in the number of assembly steps.

4. Variations

| Number of Contacts | 9 Contacts | 16 Contacts | 18 Contacts |
|--------------------|------------|-------------|-------------------|
| Mating Height | | | |
| 1.2mm | ✓ | ✓ | Under development |
| 1.7mm | ✓ | | |

Applications

LCD, cellular phones, notebook computers, miniature office automation equipment, and miniature consumer products.

| Product \ Item | Before Contact | Contacting (Effective Mating Height) | |
|----------------|----------------|--------------------------------------|-------|
| 1.2mm | | 1.55mm | 1.2mm |
| | | | |
| 1.7mm | | 2.05mm | 1.7mm |
| | | | |

■Product Specifications

| | | | | | | |
|--------|----------------------------------|------------------|---|--------------------------------------|---|---|
| Rating | Current rating Voltage rating | 0.5 A 50 V AC | Operation Temperature Operation Humidity | -35°C to 85°C (Note 1) 20% to 80% | Storage Temperature Storage Humidity | -10°C to 60°C (Note 2) 40% to 70% (Note 2) |
|--------|----------------------------------|------------------|---|--------------------------------------|---|---|

| Item | Specification | Conditions |
|---------------------------------|--|---|
| 1. Insulation resistance | 500 M ohms min. | 100 V DC |
| 2. Withstanding voltage | No flashover or insulation breakdown | 150 V AC / one minute |
| 3. Contact resistance | 50 m ohms max. | 100 mA |
| 4. Vibration | No electrical discontinuity of 1μs or more | Frequency: 10 to 55 Hz, single amplitude of 0.75 mm, 2 hours in each of the 3 directions |
| 5. Humidity | Below the contact resistance standard value. Insulation resistance: 500 M min. | 96 hours at temperature of 40 ±2°C and humidity of 90% to 95% |
| 6. Temperature cycle | Below the contact resistance standard value. Insulation resistance: 500 M ohms min. | Temperature: -55°C → +5°C to +35°C → +85°C → +5°C to +35°C Time sequence: 30 → 10 → 30 → 10 (Minutes) 5 cycles |
| 7. Stroke life | Below contact resistance standard value | 50 stroke cycles |
| 8. Resistance to soldering heat | No deformation of the insulator parts affecting performance. | Reflow soldering: At recommended temperature profile Manual soldering: Soldering iron temperature 300°C, 3 seconds |

Note 1: Includes temperature rise caused by current flow.

Note 2: The term "storage" refers to connectors stored for long period of time prior to mounting and use. Operating Temperature Range and Humidity range covers non- conducting condition of installed connectors in storage, shipment or during transportation.

■Materials

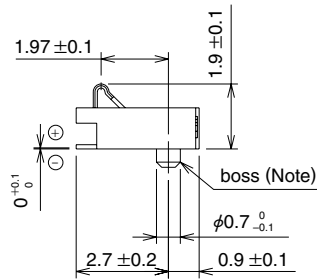
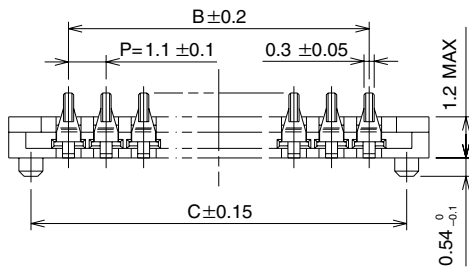
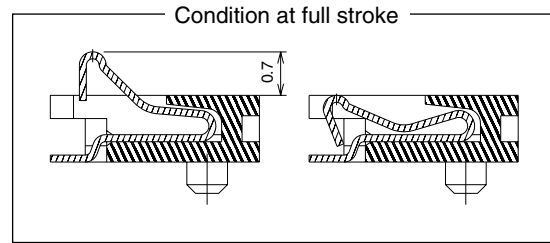
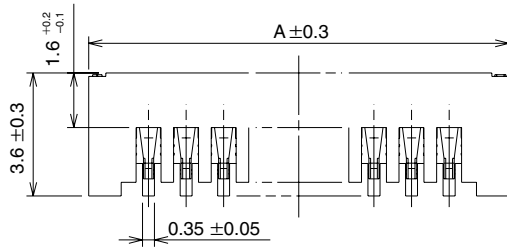
| Item | Part | Material | Finish | Remarks |
|-------------|-----------|-----------------|--------------|---------|
| Compression | Insulator | LCP | Color: Black | UL94V-0 |
| | Contacts | Phosphor bronze | Gold plating | — |

■Ordering Information

DF26 # 1.2 - * CP - 1.1 V (* *)

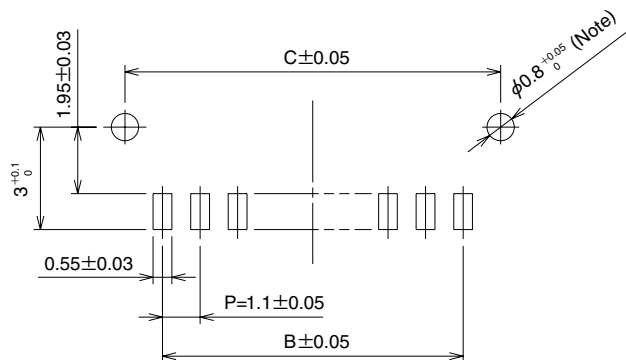
| | | |
|---|---|---|
| ① Series name: DF26 | ④ Number of contacts: 9, 16 | ⑧ Packaging (51): Embossed tape packaging (2,000 pieces per reel) 0.1 micron gold plated (66): Embossed tape packaging (2,000 pieces per reel) 0.5 micron gold plated |
| ② Boss type A: With boss | ⑤ Connector type CP: Single row compression | |
| ③ Mating height 1.2: 1.2mm 1.7: 1.7mm | ⑥ Contact pitch: 1.1mm ⑦ Contact type V: Straight SMT | |

■ Compression Connectors (Straight SMT) for 1.2mm Mating

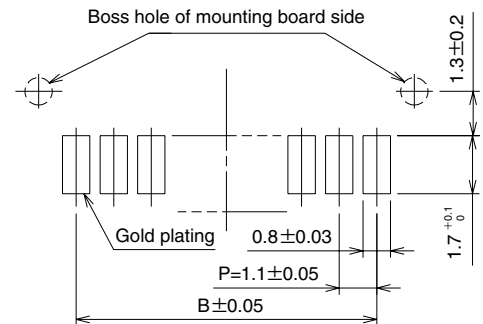


◆ PCB Mounting Pattern

Connector Mounting Surface Side



Connector Contact Side



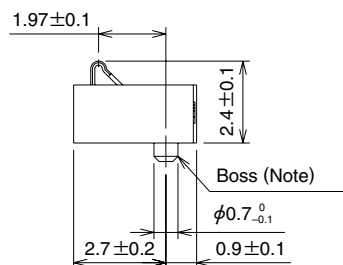
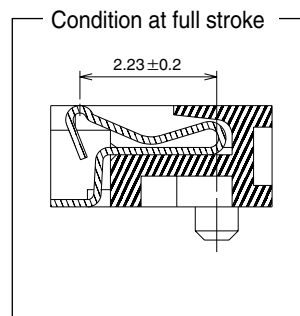
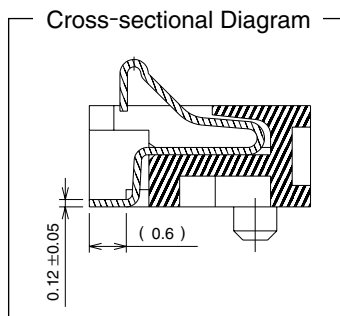
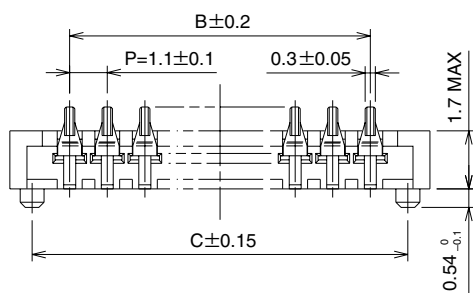
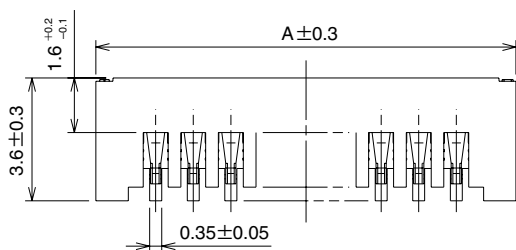
[Specification number] — **, (* *)
(51): Gold plating, embossed tape packaging (2,000 pieces per reel)

Unit: mm

| Product No. | HRS No. | Number of Contacts. | A | B | C | Embossed width | Notes |
|------------------------|-------------------|---------------------|------|------|------|----------------|-----------|
| DF26A1.2- 9CP-1.1V(**) | CL661-0002-5-** | 9 | 12.3 | 8.8 | 11.0 | 24 | With boss |
| DF26A1.2-16CP-1.1V(**) | CL661-0003-8-** | 16 | 20.0 | 16.5 | 18.7 | 32 | |
| DF26A1.2-18CP-1.1V(**) | Under development | 18 | 22.2 | 18.7 | 20.9 | 32 | |

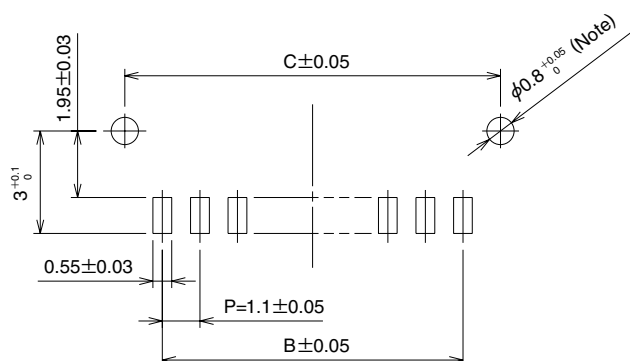
Note: Order by number of reels.

■ Compression Connectors (Straight SMT) for 1.7mm Mating

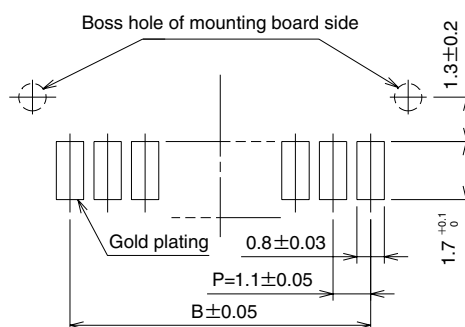


◆ PCB Mounting Pattern

Connector Mounting Surface Side



Connector Contact Side



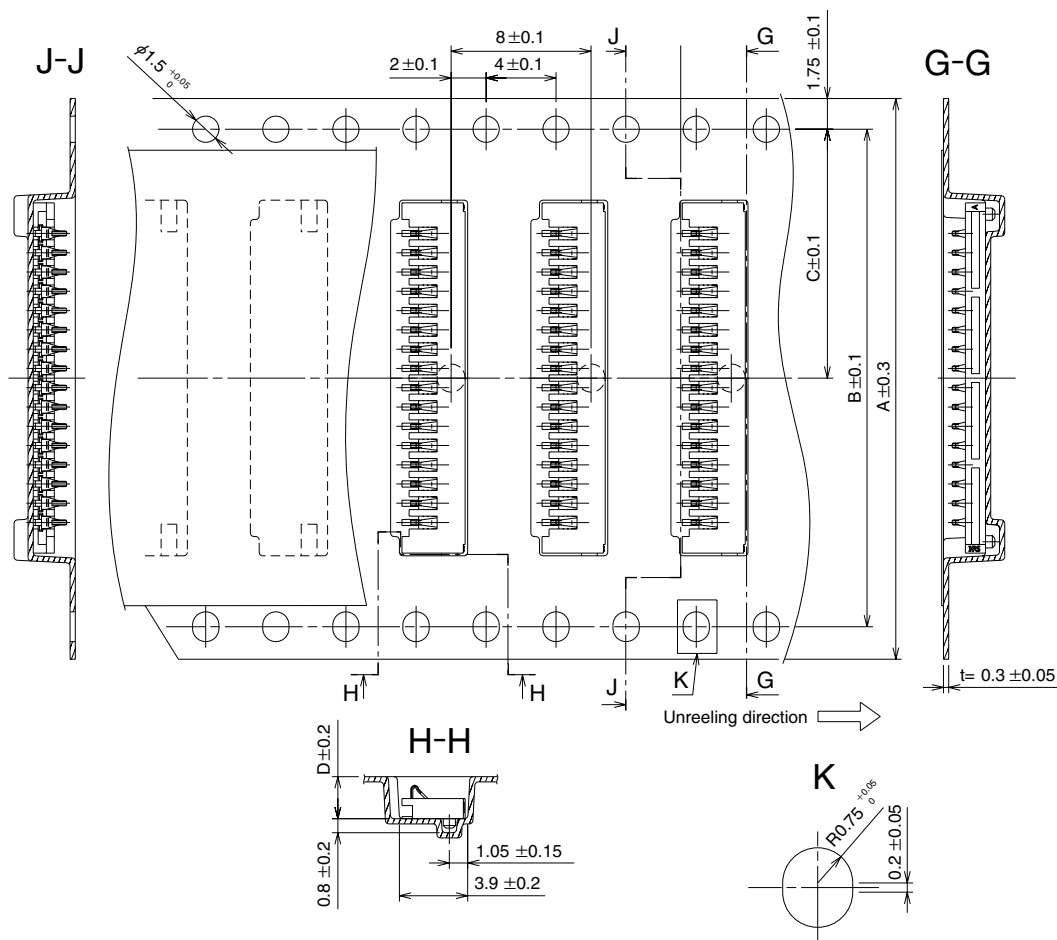
[Specification number] — **, (**)
(66): Gold plating, embossed tape packaging (2,000 pieces per reel)

Unit: mm

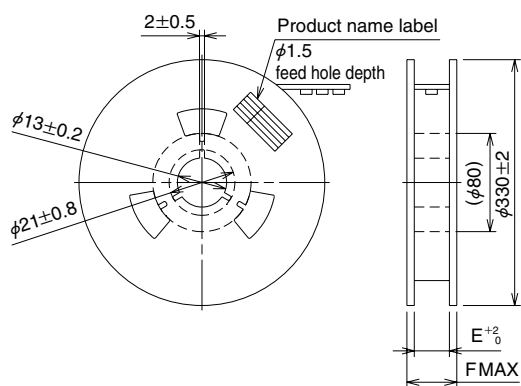
| Product No. | HRS No. | Number of Contacts | A | B | C | Embossed width | Notes |
|------------------------|-----------------|--------------------|------|-----|------|----------------|-----------|
| DF26A1.7- 9CP-1.1V(**) | CL661-0008-1-** | 9 | 12.3 | 8.8 | 11.0 | 24 | With boss |

Note: Order by number of reels.

◆ Embossed Carrier Tape Dimensions



Reel Dimension



Unit: mm

| Product No. | Number of Contacts | A | B | C | D | E | F | Notes |
|----------------------|--------------------|----|------|------|-----|------|------|-----------|
| DF26A1.2- 9CP-1.1V | 9 | 24 | — | 11.5 | 2.4 | 24.4 | 30.4 | With boss |
| DF26A1.2-16CP-1.1V | 16 | 32 | 28.4 | 14.2 | 2.4 | 32.4 | 38.4 | |
| * DF26A1.2-18CP-1.1V | 18 | 32 | 28.4 | 14.2 | 2.4 | 32.4 | 38.4 | |
| DF26A1.7- 9CP-1.1V | 9 | 24 | — | 11.5 | 2.9 | 24.4 | 30.4 | |

* Under development

◆ **Precautions for Use**

| | |
|------------------------------------|---|
| 1. Recommended Temperature Profile | <div><div><div>Temperature</div><div><div><div>IR Reflow</div><div><div>Preheating: 150°C 30 to 90 seconds</div><div>Soldering: 235±5°C 10 seconds max</div><div>220°C min 10 to 30 seconds</div></div></div></div><div><div><div>250°C</div><div>200°C</div><div>150°C</div><div>100°C</div><div>50°C</div><div>0°C</div></div><div><div>0</div><div>50</div><div>100</div><div>150</div><div>200</div><div>Time(Sec.)</div></div></div><div><div>Maximum 240°C</div><div>220°C</div></div><div><div>Preheating</div><div>Soldering</div></div></div></div> <div><div>Note1: Up to 2 cycles of reflow soldering are possible under the same conditions, provided that there is a return to normal temperature between the first and second cycle.</div><div>Note2: The temperature profile indicates the board surface temperature at the point of contacts with the connector terminals (for surface mounted receptacle).</div></div> |
| 2.Recommended manual soldering | Manual soldering: 290±10°C for 3 seconds |
| 3.Recommended screen thickness | 0.15mm |
| 4.Board warpage | Maximum of 0.03mm at the connector center, with both ends of the connector as reference points. |
| 5.Cleaning conditions | Refer to “Nylon connector Use Handbook”. |
| 6.Precautions | <div><div>■Excessive twisting when mating/un-mating may cause damage to the connector.</div><div>■The contacts are of an exposed design and touching them with bare hands may cause breakdown of the elements due to contact faults or static electricity.</div></div> |