

## SYSTEM CF Technical Specifications

TEST METHODS FOR ELECTRONIC CONNECTOR IS ACCORDING TO FOLLOWING MILITARY STANDARD:

Dielectric Withstanding Voltage	- Per MIL-STD-1344A method 3001.1
Contact Resistance	- Per MIL-STD-1344A method 3002.1
Insulation Resistance	- Per MIL-STD-1344A method 3003.1
Solderability	- Per MIL-STD-202F method 208D

### 0.80mm (.031") Center spacing FFC/FPC Connector

#### Electrical Data-

Current rating: 0.5 Amp max.  
 Dielectric Withstanding: 500 VAC for one minute  
 Contact Resistance: < 20 mΩ  
 Insulation Resistance: > 500 MΩ  
 Operating Temperature: -25°C - +85°C

#### Construction-

Insulator: Color Black, High temperature plastic  
 Flammability Rating: UL 94V-0  
 Contacts: Phosphor Bronze  
 Contacts plating: Tin-lead over 1.27μm (50μin) Nickel

### 1.00mm (.039") Center spacing FFC/FPC Connector

#### Electrical Data-

Current rating: 1 Amp max.  
 Dielectric Withstanding: 500 VAC for one minute  
 Contact Resistance: < 20 mΩ  
 Insulation Resistance: > 500 MΩ  
 Operating Temperature: -25°C - +85°C

#### Construction-

Insulator: Color Natural and Brown, High temperature plastic  
 Flammability Rating: UL 94V-0  
 Contacts: Phosphor Bronze  
 Contacts plating: Tin-lead over 1.27μm (50μin) Nickel

### 1.25mm (.049") Center spacing FFC/FPC Connector

#### Electrical Data-

Current rating: 1 Amp max.  
 Dielectric Withstanding: 500 VAC for one minute  
 Contact Resistance: < 20 mΩ  
 Insulation Resistance: > 500 MΩ  
 Operating Temperature: -40°C - +105°C

#### Construction-

Insulator: Color Natural and Black, Glass filled polyester  
 Flammability Rating: UL 94V-0  
 Contacts: Phosphor Bronze  
 Contacts plating: Tin-lead over 1.27μm (50μin) Nickel

### 2.54mm (.100") Center spacing FFC/FPC Connector

#### Electrical Data-

Current rating: 3 Amps max.  
 Dielectric Withstanding: 1000 VAC for one minute  
 Contact Resistance: < 20 mΩ  
 Insulation Resistance: > 1000 MΩ  
 Operating Temperature: -40°C - +105°C

#### Construction-

Insulator: Color Black, Glass filled polyester  
 Flammability Rating: UL 94V-0  
 Contacts: Phosphor Bronze  
 Contacts plating: Tin-lead over 1.27μm (50μin) Nickel

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### 0.80mm (.031") Center spacing FFC/FPC Connector

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 Contact Resistance: < 20 mΩ  
 Insulation Resistance: > 500 MΩ  
 Operating Temperature: -25°C - +85°C

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 Flammability Rating: UL 94V-0  
 Contacts: Phosphor Bronze  
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### 1.00mm (.039") Center spacing FFC/FPC Connector

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 Dielectric Withstanding: 500 VAC for one minute  
 Contact Resistance: < 20 mΩ  
 Insulation Resistance: > 500 MΩ  
 Operating Temperature: -25°C - +85°C

#### Construction-

Insulator: Color Natural and Brown, High temperature plastic  
 Flammability Rating: UL 94V-0  
 Contacts: Phosphor Bronze  
 Contacts plating: Tin-lead over 1.27μm (50μin) Nickel

### 1.25mm (.049") Center spacing FFC/FPC Connector

#### Electrical Data-

Current rating: 1 Amp max.  
 Dielectric Withstanding: 500 VAC for one minute  
 Contact Resistance: < 20 mΩ  
 Insulation Resistance: > 500 MΩ  
 Operating Temperature: -40°C - +105°C

#### Construction-

Insulator: Color Natural and Black, Glass filled polyester  
 Flammability Rating: UL 94V-0  
 Contacts: Phosphor Bronze  
 Contacts plating: Tin-lead over 1.27μm (50μin) Nickel

### 2.54mm (.100") Center spacing FFC/FPC Connector

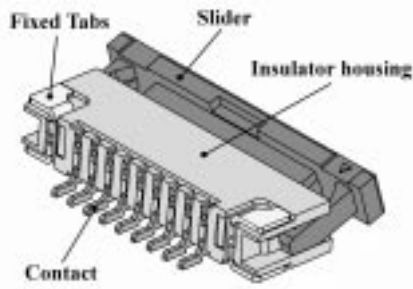
#### Electrical Data-

Current rating: 3 Amps max.  
 Dielectric Withstanding: 1000 VAC for one minute  
 Contact Resistance: < 20 mΩ  
 Insulation Resistance: > 1000 MΩ  
 Operating Temperature: -40°C - +105°C

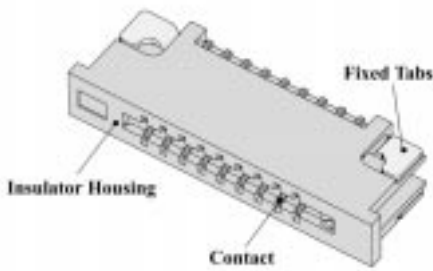
#### Construction-

Insulator: Color Black, Glass filled polyester  
 Flammability Rating: UL 94V-0  
 Contacts: Phosphor Bronze  
 Contacts plating: Tin-lead over 1.27μm (50μin) Nickel

**Construction of Connector**

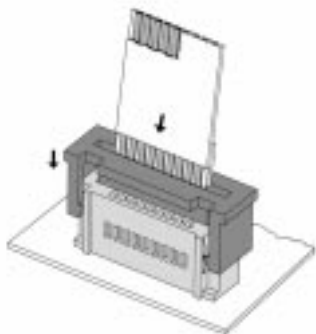


◎ Zero Insertion Force Type (ZIF)

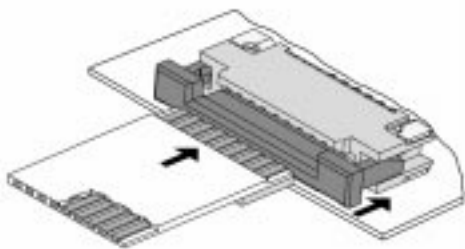


◎ Low Insertion Force Type (LIF)

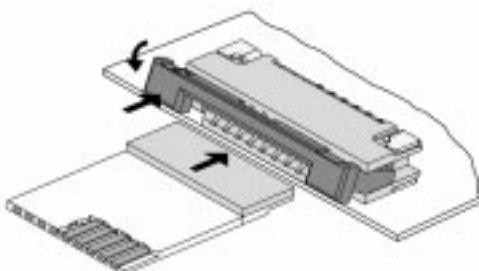
**Applications**



◎ Top Entry



◎ Side Entry to Upside Contact Connector

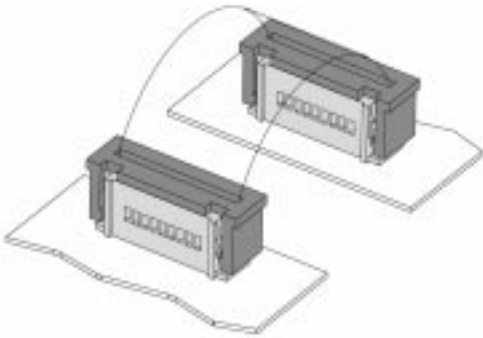


◎ Side Entry to Downside Contact Connector

**Connection Combinations of Connector for FFC Cable**

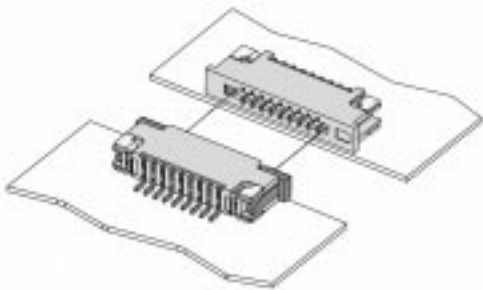
**Both ends with Zero insertion Force Type Connector**

◎ Top Entry to Top Entry



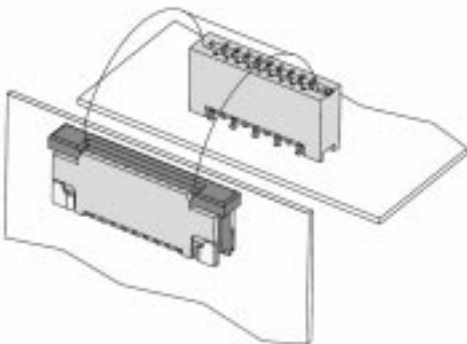
**Low insertion Force Connector to Zero insertion Force Connector**

◎ Side Entry to Side Entry



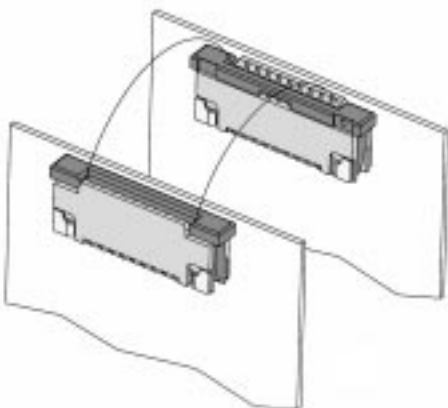
**One end with Low insertion Force Connector to Zero insertion Force Connector at the other end**

◎ Top Entry to Side Entry



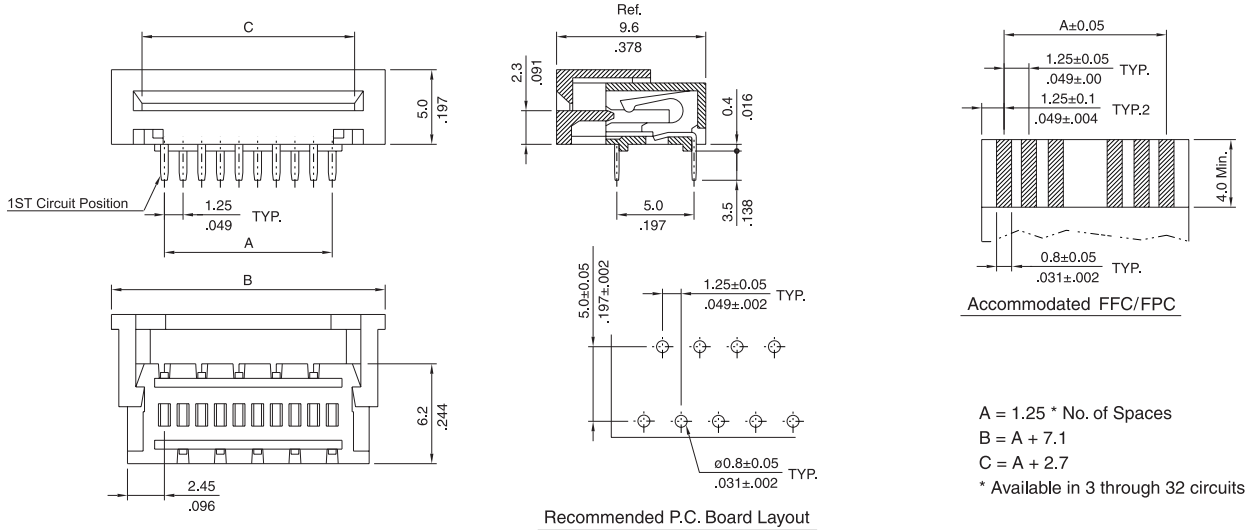
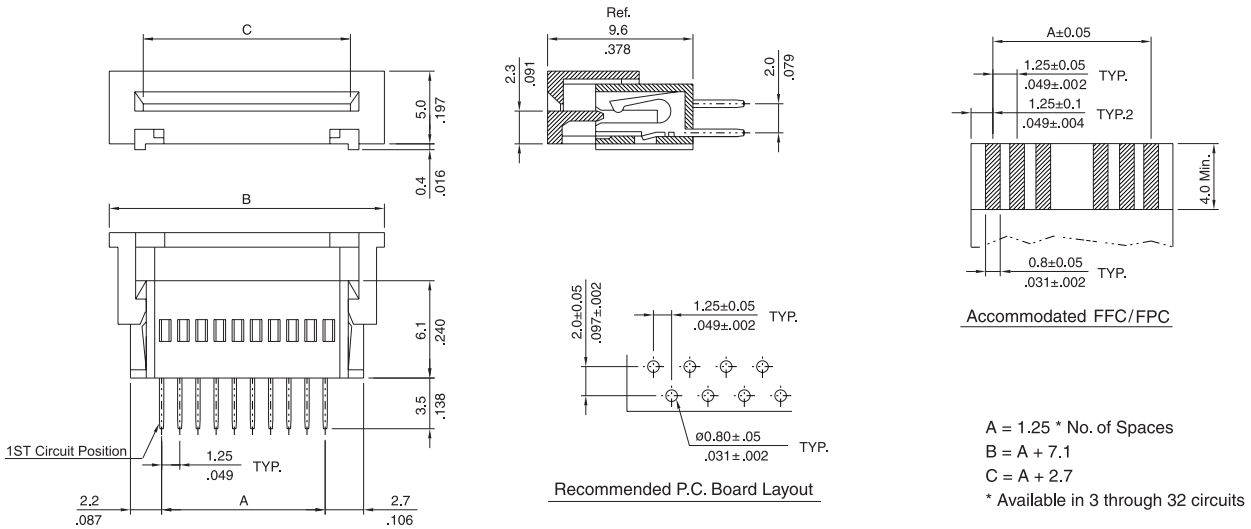
**Both ends with Zero insertion Force Connector**

◎ Side Entry to Side Entry



## CF01 Series 1.25mm(.049") ZIF FFC/FPC Connectors

- ⊙ Standard with Tube packing
- ⊙ Tin-lead plated contact
- ⊙ Insulation: Glass filled polyester UL 94V-0, Color Nature
- ⊙ Accommodated 0.3mm FFC/FPC thickness



### Ordering Code

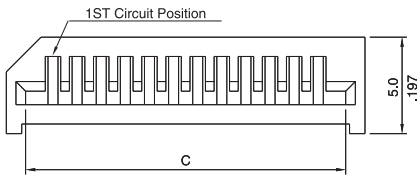
1
2
3
4
5
6

CF
01
32
1
V
0
00

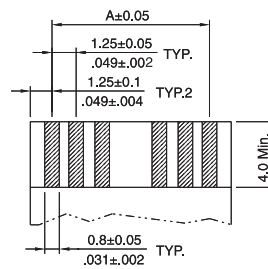
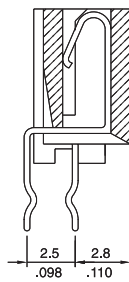
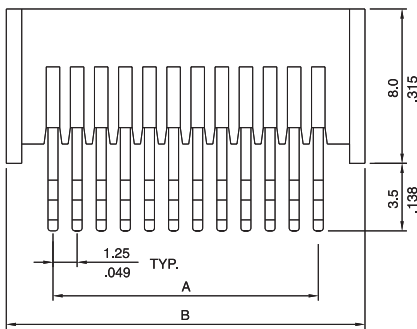
- |   |   |  |
|---|---|--|
| <p>① Series No.</p> <p>② Contacts : 03 to 32</p> <p>③ Plating code:<br/>1= Tin-lead over Nickel</p> | <p>④ Entry option:<br/>V= Straight<br/>H= Right angle</p> <p>⑤ Color: 0= Nature</p> | <p>⑥ Other options:<br/>00= Standard<br/>* Special option Consult manufacturer</p> |
|---|---|--|

**CF02 Series 1.25mm(.049") FFC/FPC Connectors**

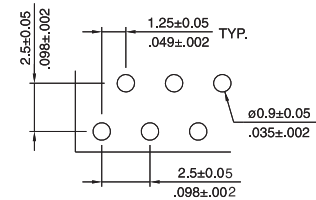
- ⊙ Standard with Tube packing
- ⊙ Tin-lead plated contact with kink tail
- ⊙ Insulation: Glass filled polyester UL 94V-0, Color Black
- ⊙ Accommodated 0.3mm FFC/FPC thickness



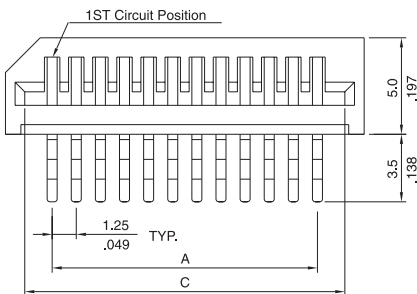
A = 1.25 \* No. of Spaces  
 B = A + 4.8  
 C = A + 2.66  
 \* Available in 4 through 36 circuits



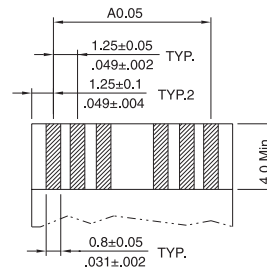
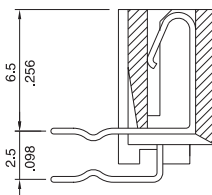
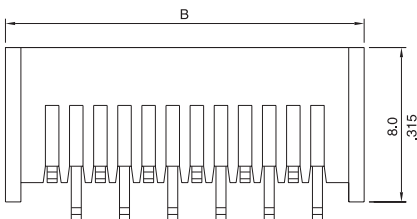
Accommodated FFC/FPC



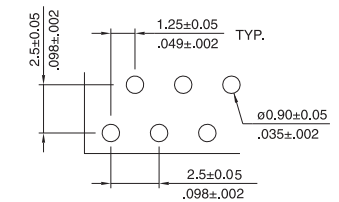
Recommended P.C. Board Layout



A = 1.25 \* No. of Spaces  
 B = A + 4.8  
 C = A + 2.66  
 \* Available in 4 through 36 circuits



Accommodated FFC/FPC



Recommended P.C. Board Layout

**Ordering Code**

**1** **2** **3** **4** **5** **6**  
**CF02 36 1 V 1 00**

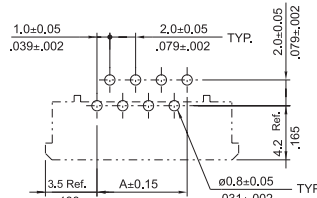
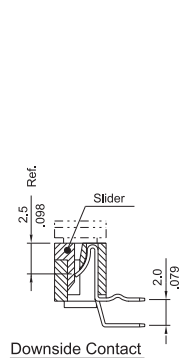
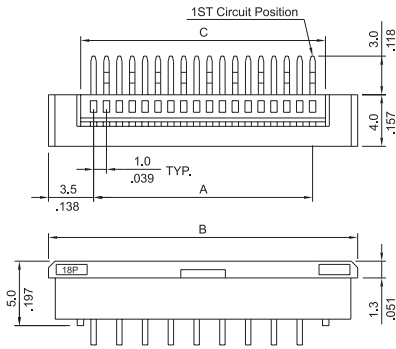
- ① Series No.
- ② Contacts : 04 to 36
- ③ Plating code:  
1= Tin-lead over Nickel

- ④ Entry option:  
V= Straight  
H= Right angle
- ⑤ Color: 1= Black

- ⑥ Other options:  
00= Standard  
\* Special option Consult manufacturer

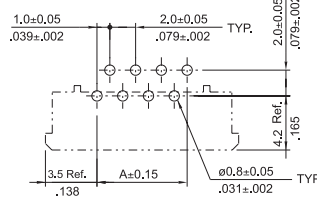
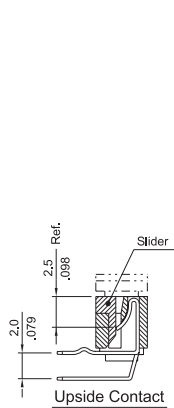
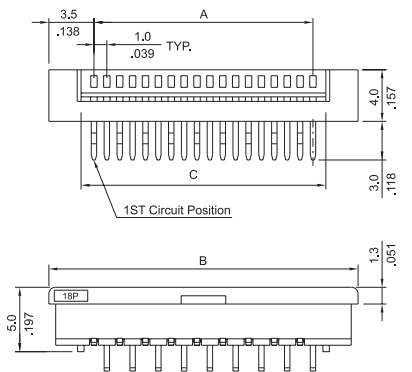
**CF04 Series 1.00mm(.039") DIP ZIF FFC/FPC Connectors**

- Standard with Tube packing
- Tin-lead plated contact
- Insulation: Glass filled Nylon 46 UL 94V-0, Color White
- Slider: Glass filled PPS UL 94V-0, Color Brown
- Options upside contact or downside contact for right angle version

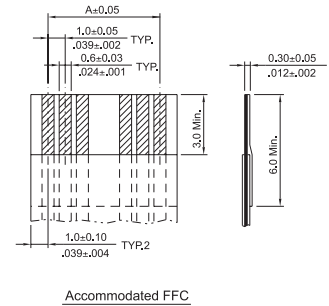


Recommended P.C. Board Layout

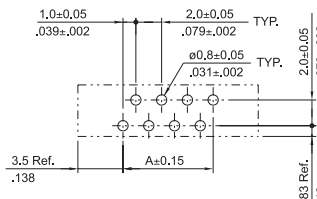
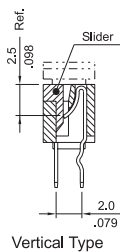
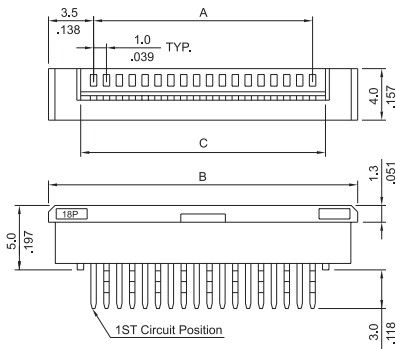
A = 1.00 \* No. of Spaces  
 B = A + 7.0  
 C = A + 2.2  
 \* Available in 4 through 32 circuits



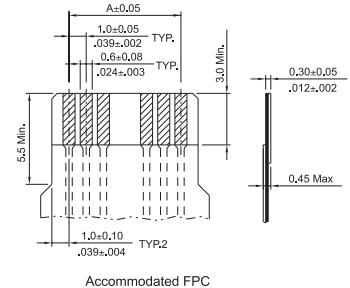
Recommended P.C. Board Layout



Accommodated FFC



Recommended P.C. Board Layout



Accommodated FPC

**Ordering Code**

**1** **2** **3** **4** **5** **6** **7**  
**CF04 32 1 H 0 D 0**

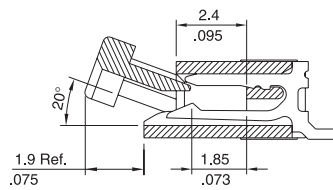
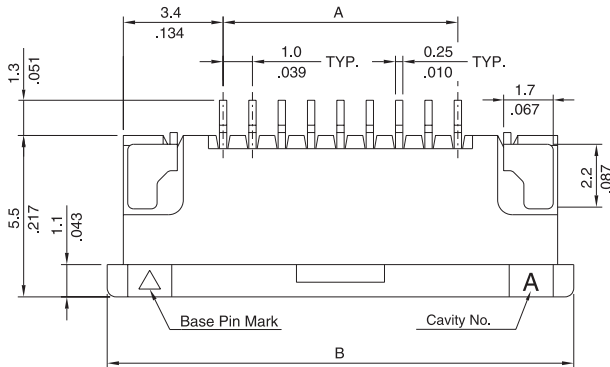
- 1 Series No.
- 2 Circuits : 04 to 32
- 3 Plating code:  
1= Tin-lead over Nickel

- 4 Entry option:  
V= Top entry  
H= Side entry
- 5 Color: 0= White

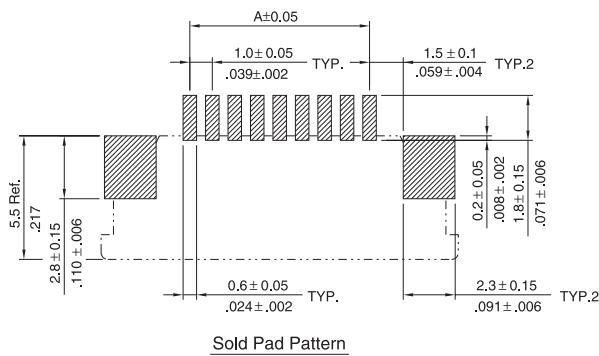
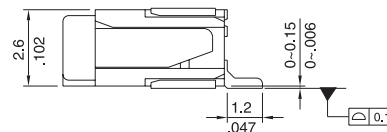
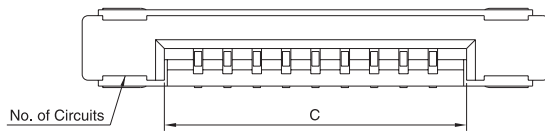
- 6 Contact style:  
0= Vertical type  
D= Downside contact (For Side entry)  
U= Upside contact (For Side entry)
- 7 Other options:  
0= Standard  
\* Special option Consult manufacturer

**CF07 Series 1.00mm(.039") SMT ZIF FFC/FPC Downside Connectors**

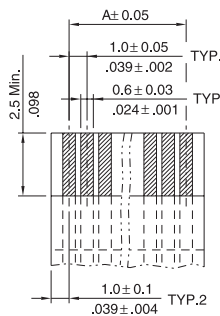
- ⦿ Tin-lead plated Phosphor Bronze Downside contact
- ⦿ Insulation: Glass filled Nylon 6T UL 94V-0, Color Nature
- ⦿ Slider: High temperature plastic UL 94V-0, Color Brown
- ⦿ Actuator designed easy for FFC/FPC installation
- ⦿ Fully check by CCD and Hi-Pot test
- ⦿ With fixed metal tabs to secure connector in place
- ⦿ Available in Tube or Reel packing



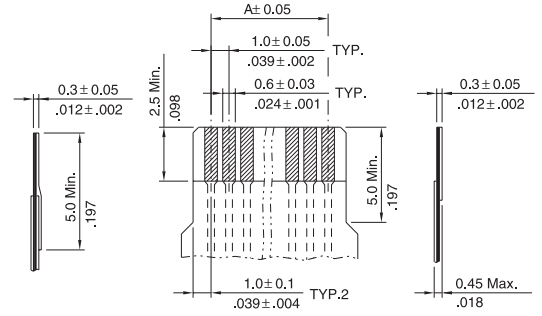
A = 1.0 \* No. of Spaces  
 B = A + 8.0  
 C = A + 2.3  
 \* Available in 6 through 32 circuits



Solder Pad Pattern



Accommodated FFC



Accommodated FPC

**Ordering Code**

① **CF07**    ② **32**    ③ **1**    ④ **D**    ⑤ **0**    ⑥ **R**    ⑦ **0**

- ① Series No.
- ② Circuits : 06 to 32
- ③ Plating code:  
1= Tin-lead over Nickel

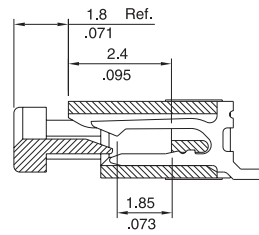
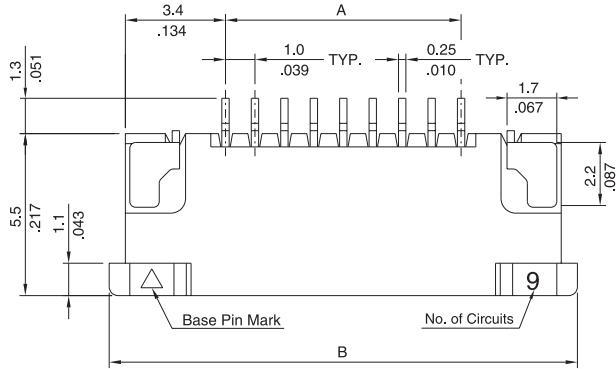
- ④ Contact style:  
D= Downside contact
- ⑤ Color: 0= Nature

- ⑥ Packing options:  
R= Tape & Reel  
T= Tube Packing
- ⑦ Other options:  
0= Standard  
\* Special option Consult manufacturer

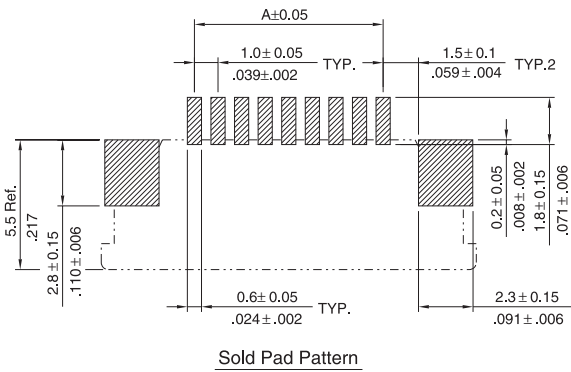
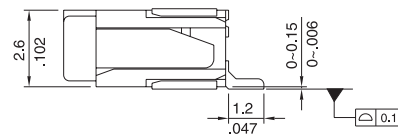
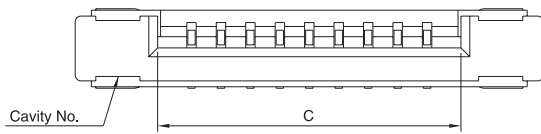


**CF07 Series 1.00mm(.039") SMT ZIF FFC/FPC Upside Connectors**

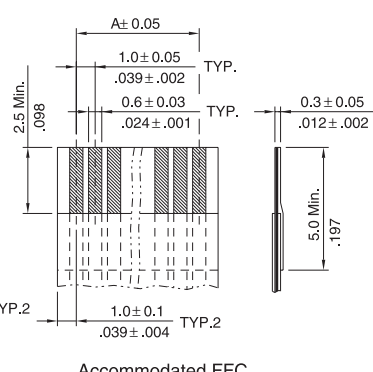
- Tin-lead plated Phosphor Bronze Upside contact
- Insulation: Glass filled Nylon 6T UL 94V-0, Color Nature
- Slider: High temperature plastic UL 94V-0, Color Brown
- Actuator designed easy for FFC/FPC installation
- Fully check by CCD and Hi-Pot test
- With fixed metal tabs to secure connector in place
- Available in Tube or Reel packing



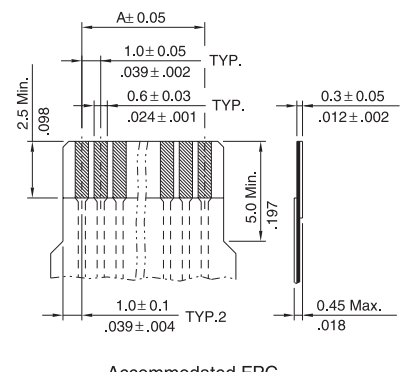
A = 1.0 \* No. of Spaces  
 B = A + 8.0  
 C = A + 2.3  
 \* Available in 6 through 32 circuits



Sold Pad Pattern



Accommodated FFC



Accommodated FPC

**Ordering Code**

**1** **2** **3** **4** **5** **6** **7**  
**CF07 32 1 U 0 R 0**

- ① Series No.
- ② Circuits : 06 to 32
- ③ Plating code:  
1= Tin-lead over Nickel

- ④ Contact style:  
U= Upside contact
- ⑤ Color: 0= Nature

- ⑥ Packing options:  
R= Tape & Reel  
T= Tube Packing
- ⑦ Other options:  
0= Standard  
\* Special option Consult manufacturer