

## FA10-xx FFC Standard Pitch 1.0mm unshielded

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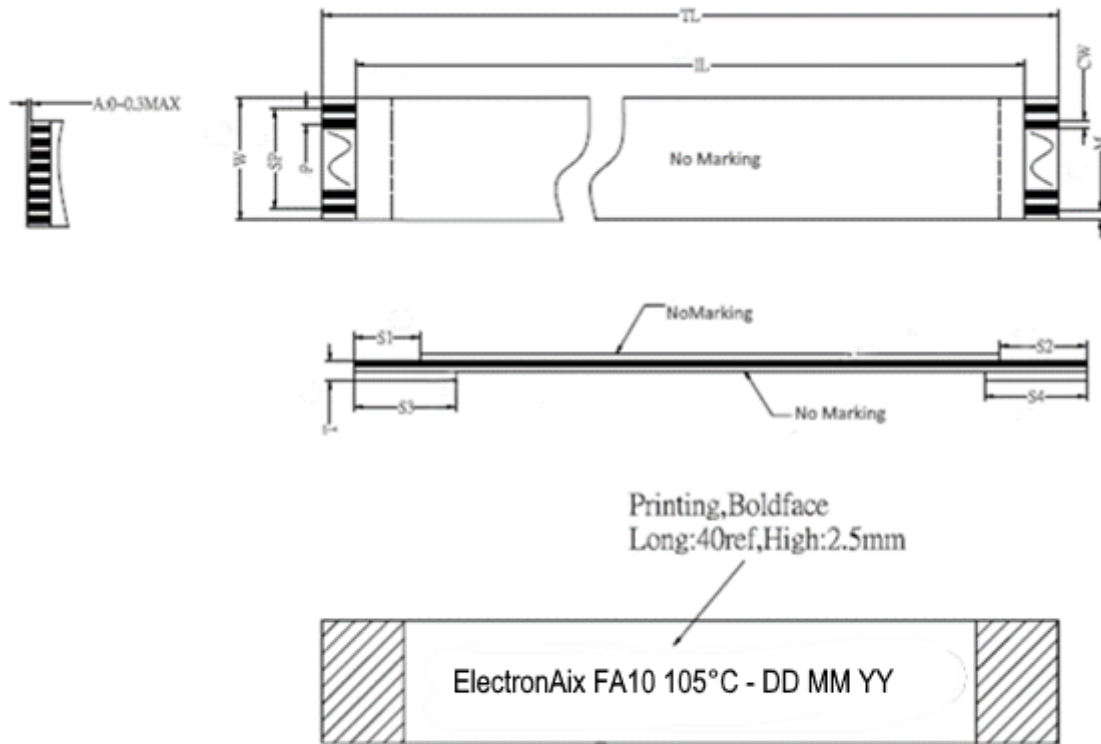
### Features

Compatible with all standard ZIF connectors  
High flexibility and softness

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### Dimensions

Drawing only for reference



|                           |                |             |        |
|---------------------------|----------------|-------------|--------|
| Pitch                     | P              | 1.0         | ±0.08* |
| Total Pitch               | P <sub>t</sub> | (N-1) x 1.0 | ±0.1   |
| Width                     | W              | (N+1) x 1.0 | ±0.1   |
| Insert Thickness          | T              | 0.3         | ±0.03  |
| Strip length              | S1             | 4           | ±1.0   |
|                           | S2             | 4           | ±1.0   |
| Reinforcement tape length | S3             | 10**        | ±2     |
|                           | S4             | 10**        | ±2     |
| Inner length              | IL             | TL-(S1+S2)  | ±2     |
| Total length              | TL             |             | ±2     |
| No. of pins               | N              | NN (10-60)  |        |
| Conductor Dimension ***   | Thickness 1    | 0.035       | ±0.005 |
|                           | Width          | 0,5         | ±0.05  |
| Slanting                  | A              | < 0.3       |        |

\* Tolerance depending on connector spec. small tolerance is possible

\*\* or customized length

\*\*\* wire options see below

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### Possible Types:

A = SAME = Same Side



Label or Print on this side: ElectronAix FA10

B = OPP = Opposite Side



Label or Print on one side: ElectronAix FA10

### Partnumber:

|                                                                      |   |    |   |     |   |    |    |    |                                                 |
|----------------------------------------------------------------------|---|----|---|-----|---|----|----|----|-------------------------------------------------|
| FA10                                                                 |   |    | P |     | - |    |    | 53 | G                                               |
| FA10                                                                 | T | NN | P | LLL | - | 44 | SS | 53 | G                                               |
|                                                                      |   |    |   |     |   |    |    |    | Gold Plating                                    |
|                                                                      |   |    |   |     |   |    |    |    | Wire Dimension 0,5x0,035; options see table     |
|                                                                      |   |    |   |     |   |    |    |    | SS= Supporter Tape Length; 10mm/10mm = Standard |
|                                                                      |   |    |   |     |   |    |    |    | Strip Length in 4mm/4mm                         |
|                                                                      |   |    |   |     |   |    |    |    | LLL= Total Length in mm                         |
|                                                                      |   |    |   |     |   |    |    |    | P=Positions                                     |
|                                                                      |   |    |   |     |   |    |    |    | NN= No of Wires                                 |
|                                                                      |   |    |   |     |   |    |    |    | T= Type: A= same Side / B= Opposite Side        |
| Product Series = FA10 for all standard ZIF connectors with 1.0 pitch |   |    |   |     |   |    |    |    |                                                 |

### Wire options

| P/N        | Thickness    | Width      | Resistance (Ohm) | Rated Current | Plating   |
|------------|--------------|------------|------------------|---------------|-----------|
| 55         | 0,05         | 0,5        |                  | 0.4A          | Au        |
| <b>53*</b> | <b>0,035</b> | <b>0,5</b> |                  | <b>0.4A</b>   | <b>Au</b> |
| 65         | 0,05         | 0,65       |                  | 0.4A          | Sn        |

\* standard

### Contact us for customizations:

- Shielded with double side wrapped shield FA10E-xx
- Shielded with double side laminated shield FA10E-xx-L
- Other wire dimension
- Special print or labels
- Folding

### Environmental

The products meet EU RoHS Directive 2011/65/EU, including the delegated regulation (EU) 2015/863  
The products meet EU REACH Directive 1907/2006/EU



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### Specification

#### 1.Scope

For Laminated Flat Cable (Flat Conductor) With Reinforcing Tape

#### 2. Applicable documents

The specification covers the construction and electrical properties of laminated flat cable (Flat Conductor) with reinforcing tape based on UL subject 757.

#### 3.Material

3.1 Insulation: PET,White,T=0.06mm,UL20706 105°C 60V VW-1

3.2 P/ Tape: PET,T=0.225mm

3.3 Conductor: Cu,0.5\*0.035mm

3.4 Plating: Au (2μ" min)

#### 4. Rating

4.1 Operating Voltage : 60V

4.2 Current Rating : 0.4A

4.3 Normal use Inserting: 5 cycles

4.4 Ambient Temperature Range: -40 ~ + °C 105°C

4.5 Warehouse Conditions: 25°C±15°C ; ≤60%RH

#### 5. 6. Appearance

Reference DOC-JWI-QA0121-XXX FFC Inspection SOP

### 6 Tests

| Item                                               | Test Method                                            | Specification                                                     |
|----------------------------------------------------|--------------------------------------------------------|-------------------------------------------------------------------|
| Conductor resistance                               | JIS C3102 at 20°C                                      | See table                                                         |
| Insulation resistance                              | JIS-C3102                                              | >100 MΩ                                                           |
| Dielectric withstanding voltage between conductors | AC250V 1min (0,5mm Pitch)                              | No Breakdown<br>Current Leakage 1mA max                           |
| Flexing                                            | 180° bending                                           | >20 Cycles                                                        |
|                                                    | U-Bending R5x50mm Stroke<br>60 cycles / min            | >100.000 Cycles                                                   |
| Heat Resistance                                    | +105°C 96hrs                                           | Insulation and Dielectric withstanding Voltage pass               |
| Cold Resistance                                    | -40°C 96hrs                                            | Insulation and Dielectric withstanding Voltage pass               |
| High Temperature High Humidity                     | +60°C (90-95)%RH 96hrs                                 | Insulation and Dielectric withstanding Voltage pass               |
| Temperature Cycling                                | - 40°C 4hrs<br>+25°C 2hrs<br>+105°C 4hrs<br>+25°C 2hrs | Insulation resistance and dielectric withstanding voltage pass    |
| Salt Spray                                         | +35°C 24hrs PH 6.5-7.2                                 | before and after test, no corrosion and oxidation at contact area |

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### 7 Special Attention

- 7.1 Please hold supporting tape, then insert or pull out the FFC from a connector in a straight
- 7.2 When insert to connector, please avoid excessive force
- 7.3 After insert to connector, shall be not bended at Supporting-tape excessive, because Joiner is broken
- 7.4 For gold plated FFC, there is the Ni-plating, so please do not bend the FFC at the terminal part of Conductor. Otherwise a crack will be occurred at the plated part; after insert into the Connector, please also do not bend the FFC at the part of Supporting-tape, otherwise a crack will be occurred at the plated part.
- 7.5 Please avoid excessive force around supporting-tape
- 7.6 Please evaluate FFC properties in advance when use under particular condition (High temperature, High Humidity etc). There is possibility to be corrosion after 6 month
- 7.7 Please avoid the moving wiring at bending portion
- 7.8 Please estimate enough space when Joiner is used the moving wiring
- 7.9 When dropped to the floor, please clean Joiner's leads
- 7.10 Please don't touch the terminal part of the Conductor by hand, for it will cause discolored or rusted
- 7.11 Please don't use the sulfurous material together with the FFC to prevent short circuit between sulfurized conductors
- 7.12 Before Assembly: Expiry Date For One Year  
After Assembly: Expiry Date For Fifteen Years