

New developed Leaf spring type connector 『 SFC series』 releases
Small Fine pitch flexible Connector

Yokowo Co.,Ltd
7-5-11 Takinogawa,
Kita-ku Tokyo Japan
TEL:03-3916-3111 (Rep)

■ Yokowo Activity

- Yokowo has micro precision processing technology , hold a dominant share of the pogo pin market, On 2004 yokowo had“ Evolution * Renovation from Minor to Major diversified connector supplier as middle terms company strategy. We are carrying on promoting Leaf Spring type connector by today as one of our main business items.
- In the result of our promotion , leaf spring antenna connector & leaf spring battery connector for mobile phone were used by Japanese main mobile phone manufacture. This time yokowo developed/released new developed leaf spring connector 『SFC series 』 as further strategic products. This newly narrow pitches connector will be able to be contributed wiring at small space area.

■ Characteristics

- 『 SFC series 』 has following characteristic,
 - Contact Pitch of plug side is 0.4mm
 - Plug contact side can be connected to 2 types wire.
One is FPC (as hereafter referred to F type) , another one is micro wire (As hereafter referred to Wtype). Receptacle side is common design for F&Wtype.
 - Outer diameter of Plug side is the smallest size in the B to B connector market,
Cross section surface is □1.2mm×2mm
And plug side can be passed through smaller hinge hole (φ 2.5mm) .
 - Connection method is vertical; 1.5mm mounting height is realized,
It is advantageous for space saving design,
- Due to F type & W type were developed, Receptacle side does not have to be changed for cable type alternation. It will be realized design flexibility.
For example, in the developing stage , designer can select cable wire type
Cable wire type can be easier to change wire length than FPC type.
After layout of wire is decided, designer will be able to change FPC type.

■ Sales Plan

- o 『 S F C series 』 sales target are “wiring of hinge area for mobile phone / Digital camera” and “Wiring of Personal Computer and PDA”,
From April 06 we are starting to subscribe samples and release 20Pos/30 Pos type.
Successively we will release another pos type.
- o 『 S F Cseries 』 are produced at yokowo mother factory (Tomioka city , Gunmma Prefecture)for some time. After demand increasing, production site will be transfer to Yokowo China factory which pogo pin are produced in. Production plan is 3million sets.

■ 『 SFC Series 』 design concept

《 Feature 》

- ◆ Receptacle (PCB side) is common for F type W type
- ◆ Ultra Minimize plug outer diameter (Cross section surface is □1.2mm×2mm)
- ◆ Multilayer FPC with shield can be connected.
- ◆ Low Profile、 Space Saving designs (Pitch 0.4mm、 Mating height 1.5mm are realized)

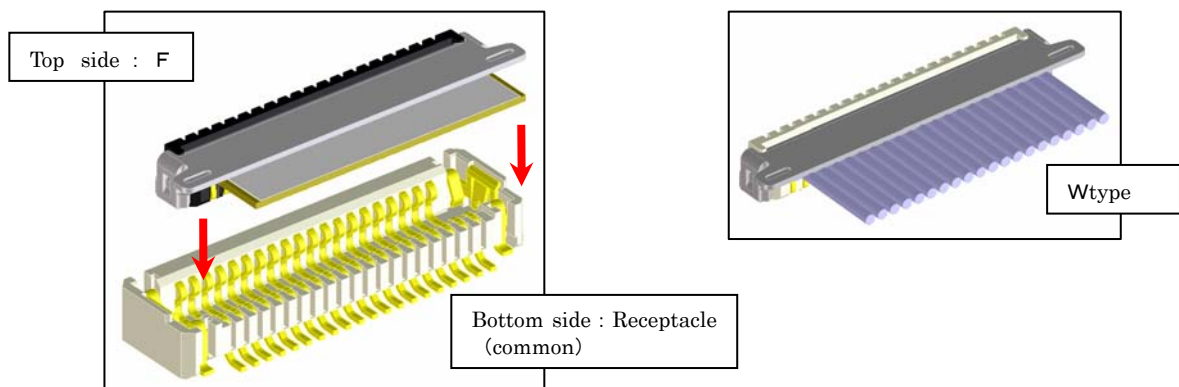
Furthermore

- 「 F type 」 structure can be applicable for FPC with shield film , which mainly is using for measure EMI in the market , and for double sided FPC ,which is using for high transmission, can be treatment easily without reducing contact pos as None soldering.
- 「 W type 」 structure can be applicable for AWG#36 ~ #40 (Coating outer diameter : ϕ 0.24mm) high flexion micro wire , and it can be connected without soldering.

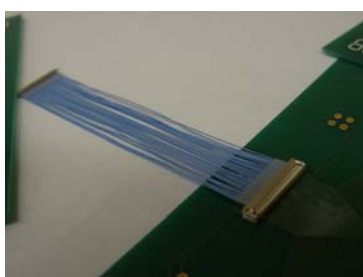
《 Main Specification 》

Test items	Spec
Rated(current)	AC/DC 50V 0.4A (AWG#40 : 0.3A)
Operation Temperature	-25°C ~ +85°C.(Incl temperature rising as current applying)
Contact Resistance	Max 50mΩ.(Not incl contact resistance of FPC wire conductor)
Insulation Resistance	Min.DC100V · 100MΩ.
Dielectric Strength	AC100V · 1 Min

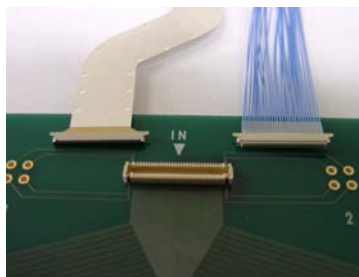
《 Basic Structure 》 ※Patent Pending



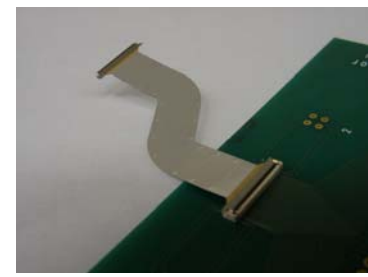
《 Picture of SFC 》



(Wtype)



(Left :Ftype, Center :receptacle, Right:Wtype)



(F type)

【Remarks】

※ F P C : FPC means Flexible Printed Circuit. It is kind of PCB.
FPC has high bending characteristics, and made by polyimide film and foil copper as main material.

※Receptacle : mated side (female connector)

※Shield : Shield is for protective construction for electrical block and external noise.
For example 1.signal layer on FPC are covered by ground layer for eternal noise protection 2.microwire are covered by copper tape or braided tape for noise protection.

※China Factory : Dongguan Yokowo Electronics Co.,ltd.
▪ Foundation : May 1994
▪ Location : Fu Zhu Shan District,Liao Bu Town,Dongguan City,
Guangdong Province, China
▪ Major Products : Pogo pin ▪ Coil Connector ▪ Other connectors, Antenna.

Enquiries about this new release to:
Yokowo Connector Company
Fine Connector Division
Tel : +81-(0)3-3916-3112