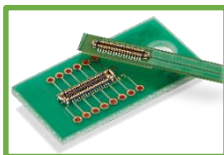


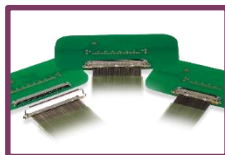
① LCD Connection



FPC Connector
(1 Piece)



FPC-to-Board
(2 Piece)



Micro Coaxial
Connector

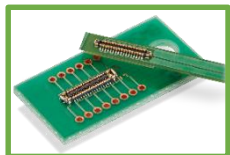
② Touch Panel

③ LED Backlight

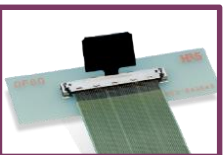


FPC Connector
(1 Piece)

④ Camera

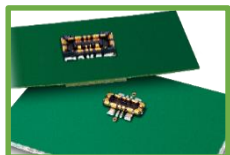


FPC-to-Board
(2 Piece)



Micro Coaxial
Connector

⑤ Battery



FPC-to-Board
(2 Piece)



Wire-to-Board

⑥ Speaker/Microphone



FPC Connector
(1 Piece)



Wire-to-Board

⑦ Antenna



RF Switch



RF Cable Connector



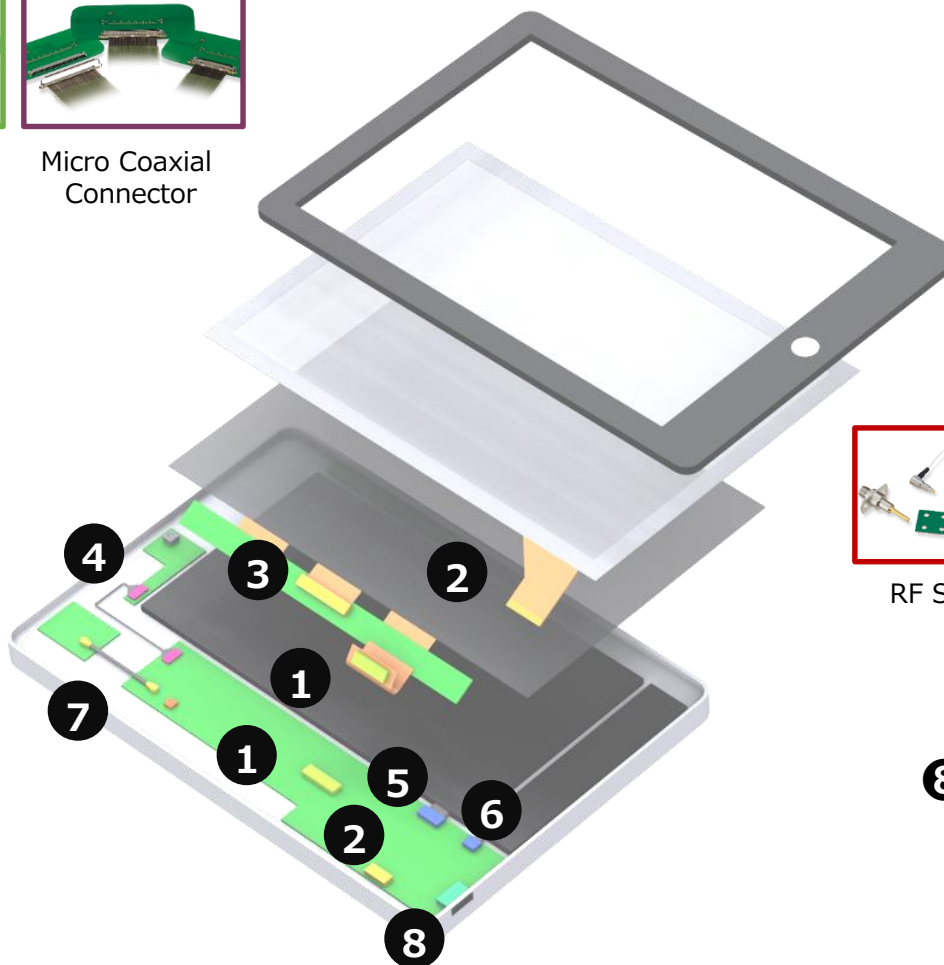
FPC-to-Board
(2 Piece)

HRS 5G

⑧ Interface

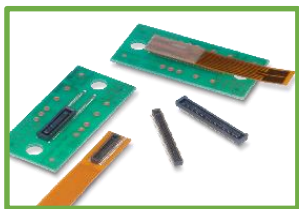


I/O Connector



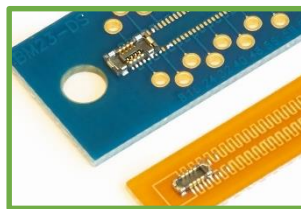
1. LCD

FPC-to-Board (2 Piece)



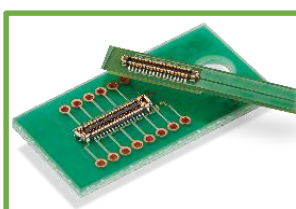
DF40

Wide Stacking Height Variety
Pitch: 0.4mm
Stacking Height: 1.5-4.0mm
Depth: 3.38mm
Pin Count: 10-120pos.
Rated Current: 0.3A



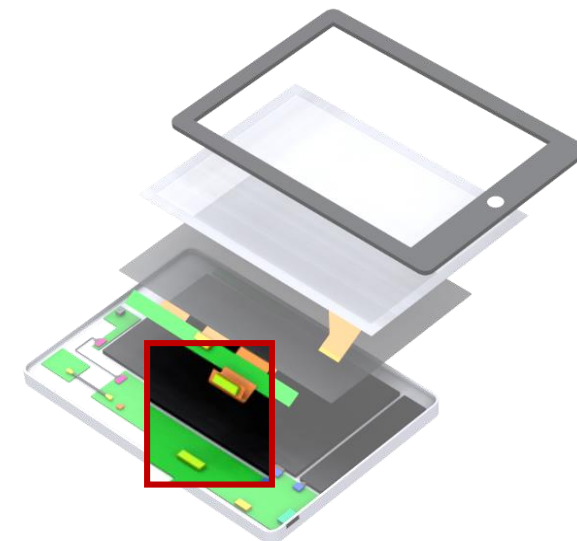
BM23FR/PF

Small-Sized, Wide Variety
Pitch: 0.35mm
Stacking Height: FR: 0.6/0.8mm
PF: 0.8mm
Depth: 1.98mm
Pin Counts: FR: 6-60pos.
PF: 10-64+2pos.
Rated Current: FR: 0.3A
PF: 5A for power,
0.3A for signal

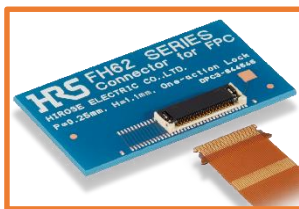


BM28

Low profile, Space-saving
Hybrid connector up to 5A
Pitch: 0.35mm
Stacking Height: 0.6mm
Depth: 1.7mm
Pin Count: 6-60+2pos.
Rated Current: Power 5A
Signal 0.3A

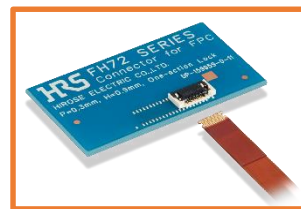


FPC Connectors (1 Piece)



FH62 OneAction FH

Superior Operability
(One Action)
Top Contact
Pitch: 0.25mm
Height: 1.1mm
Depth: 4.0mm
Pin Count: 13-61pos.
Rated Current: 0.3A



FH72 OneAction FH

Superior Operability
(One Action)
Top Contact
Pitch: 0.3mm
Height: 0.9mm
Depth: 3.5mm
Pin Count: 11-31pos.
(Planned Development: 7-31)
Rated Current: 0.3A



FH34 FH

High Retention Force,
Ideal Low Pin Count
Top/Bottom Contact
Pitch: 0.5mm
Height: 1.0mm
Depth: 3.8mm
Pin Count: 4-50pos.
Rated Current: 0.5A



FH58/M FH

Space-Saving,
Top/Bottom Contact
Pitch: 0.2mm
(FH58M: 0.25mm)
Height: 0.9mm
Depth: 3.1mm
(FH58A: 3.4mm)
Pin Count: 7-71pos.
(Under Development: 81)
Rated Current: 0.2A

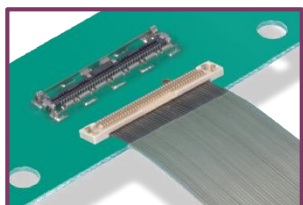


FH35C FH

0.3mm pitch standard connector
Top/Bottom Contact
Pitch: 0.3mm
Height: 0.9mm
Depth: 4.2mm
Pin Count: 9-61pos.
Rated Current: 0.2A

1. LCD(High Speed)

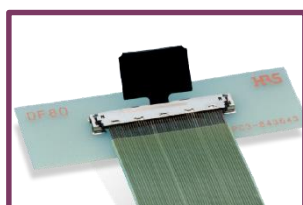
Micro Coaxial Connector



**LVDS
MIPI**

DF36

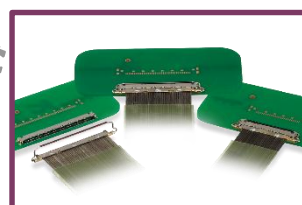
0.4mm Pitch Space-Saving Connector
Pitch: 0.4mm
Mated Height: 1.5mm
Mated Depth: 2.8/4.4mm
Pin Count: 15-50pos.
AWG wire: 42-46
Discrete Wire:
34 & 36 AWG, $\phi 0.33\text{mm}$ Max.
Rated Current: 0.2-0.25A



**Type-C
LVDS
eDP**

DF80

Space-saving, User-friendly Operation
Pitch: 0.5mm
Mated Height: 1.72mm
Mated Depth: 5.1mm
Pin Count: 30, 40, 45, 50pos.
AWG Wire: 40-46
Discrete Wire:
32 & 36 AWG, $\phi 0.5\text{mm}$ Max.
Rated Current: 0.1-0.5A



**Type-C
LVDS
eDP
MIPI**

DF81

Space-Saving with Rotary Latch, Horizontal Mating
Pitch: 0.4mm
Mated Height: 0.9mm
Mated Depth: 4.4mm
Pin Count: 30, 40, 50pos.
AWG Wire: 36-46
Discrete Wire:
34-36 AWG, $\phi 0.54\text{mm}$ Max.
Rated Current: 0.1-0.8A

FPC Connectors (1 Piece)

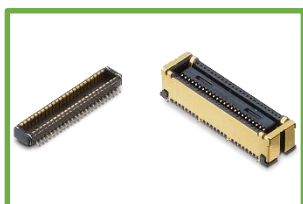


**Type-C
LVDS
eDP**

FH55/FH55M

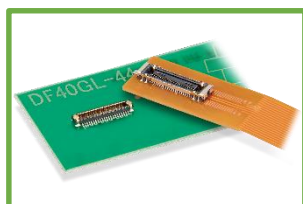
10+Gbps High Speed Transmission
Bottom Contact
Pitch: 0.5/0.4mm
Height: 1.5mm
Depth: 4.2mm
Pin Counts: 10, 22, 31, 40pos.
Rated Current: 0.5/0.4A

FPC-to-Board (2 Piece)



DF40G

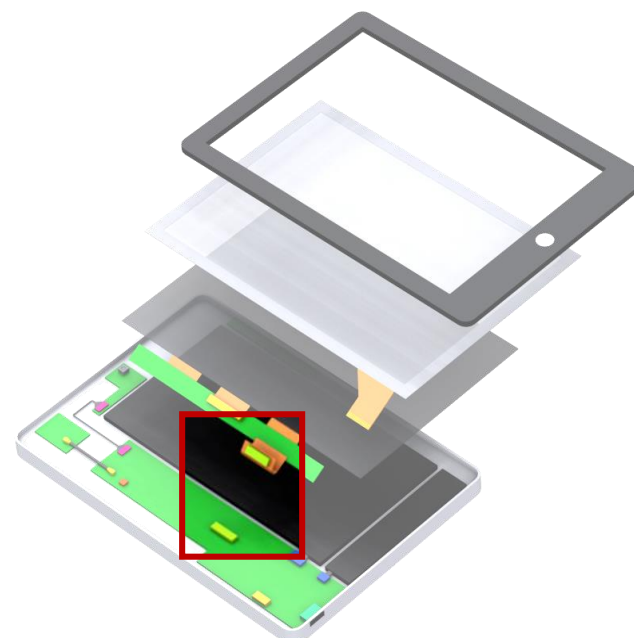
EMI prevention with Shield
Pitch: 0.4mm
Mated Height: 1.5/3.0/3.5mm
Depth: 3.68mm
Pin Count: 10-70pos.
Rated Current: 0.3A



**Type-C
LVDS
MIPI**

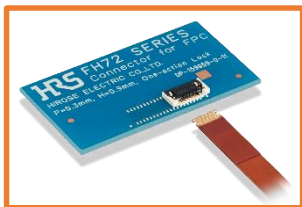
DF40GL

Positive Lock
Pitch: 0.4mm
Stacking Height: 1.5mm
Stacking Depth: 3.68mm
Pin Count: 44pos.
Rated Current: 0.35A



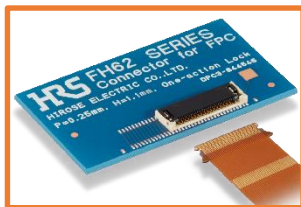
2. Touch Panel

FPC Connectors (1 Piece)



FH72 OneAction FH

Superior Operability
(One Action)
Pitch: 0.3mm
Height: 0.9mm
Depth: 3.5mm
Pin Count: 11-31pos.
(Planned Development: 7-31)
Rated Current: 0.3A



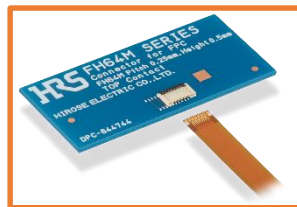
FH62 OneAction FH

Superior Operability
(One Action)
Top Contact
Pitch: 0.25mm
Height: 1.1mm
Depth: 4.0mm
Pin Count: 13-61pos.
Rated Current: 0.3A



FH58/M FH

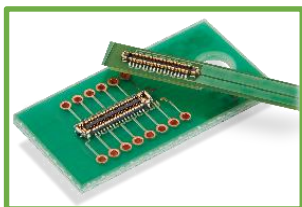
Space-Saving,
Top/Bottom Contact
Pitch: 0.2mm
(FH58M: 0.25mm)
Height: 0.9mm
Depth: 3.1mm
(FH58A : 3.4mm)
Pin Count: 7-71pos.
(Under Development: 81)
Rated Current: 0.2A



FH64MA FH

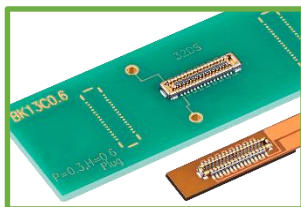
World's Lowest Profile
Top Contact
Pitch: 0.25mm
Height: 0.5mm
Depth: 3.15mm
Pin Count: 5-25pos.
Rated Current: 0.2A

基板対FPC (2ピース)



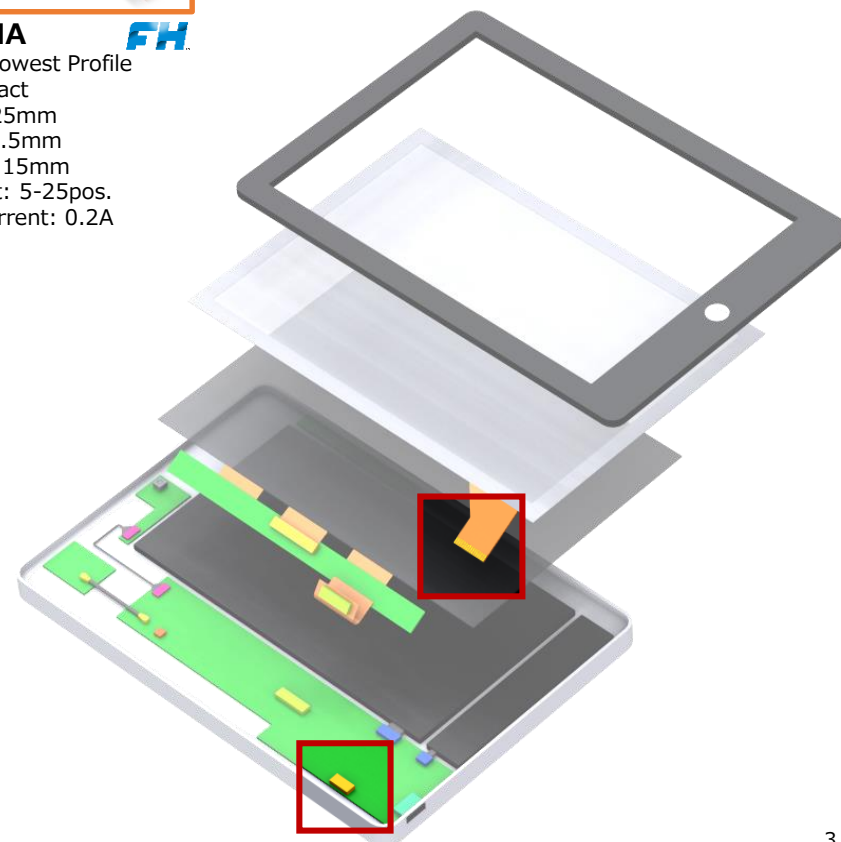
BM28

Low Profile, Space-Saving
Hybrid Connector up to 5A
Pitch: 0.35mm
Stacking Height: 0.6mm
Depth: 1.7mm
Pin Count: 6-60+2pos.
Rated Current: Power 5A
Signal 0.3A



BK13

Low Height,
Hybrid Connector up to 5A
Pitch: 0.35mm
Stacking Height: 0.6mm
Depth: Plug 1.8mm
Receptacle 1.9mm
Pin Count: 10-60pos.
Rated Current: 5A for power
0.3A for signal



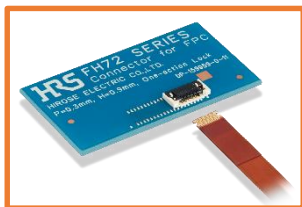
3. LED Backlight

FPC Connectors (1 Piece)



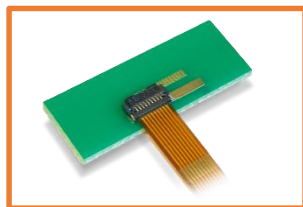
FH34 **FH**

High Retention Force,
Ideal Low Pin Count
Top/Bottom Contact
Pitch: 0.5mm
Height: 1.0mm
Depth: 3.8mm
Pin Count: 4-50pos.
Rated Current: 0.5A



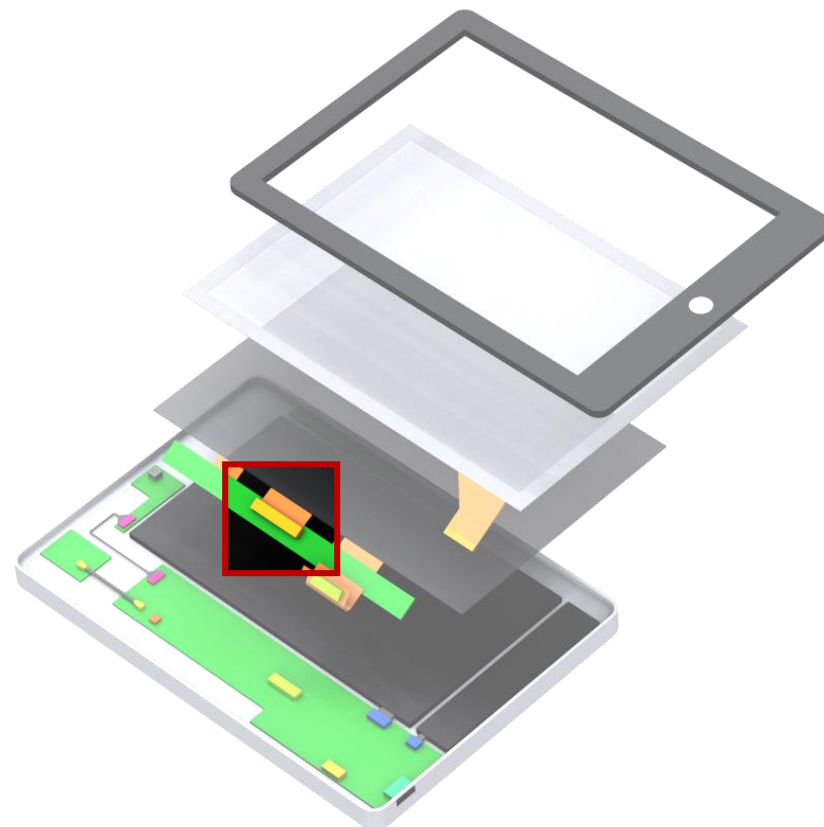
FH72 OneAction **FH**

Superior Operability
(One Action)
Top Contact
Pitch: 0.3mm
Height: 0.9mm
Depth: 3.5mm
Pin Count: 11-31pos.
(Planned Development: 7-31)
Rated Current: 0.3A



TF13BA/BSA **FH**

Back Flip, Space-Saving,
High Retention Force
Bottom Contact
Pitch: 0.4mm
Height: 0.9mm
Depth: 3.0mm
Pin Count: 6-20pos.
Rated Current: 0.5A

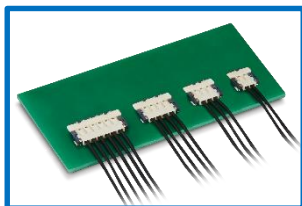


Wire-to-Board



DF57H **SnapBee**

Low Profile, Snap Lock Design
Pitch: 1.2mm
Mated Height: 1.4mm
Depth: 4.65mm
Pin Count: 2-6pos.
AWG Wire: 28-34
Rated Current: 0.5-3A



DF58 **SnapBee**

World's Lowest Profile
with 28 AWG
Pitch: 1.2mm
Mated Height: 1.0mm
Depth: 4.97mm
Pin Counts: 2-6pos.
AWG Wire: 28-30
Rated Current: 1.5-3A

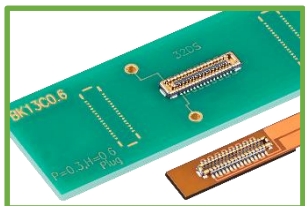


DF53 **SignalBee**

Small, Low Profile
Pitch: 0.6mm
Mated Height: 1.45mm
Depth: 3.55mm
Pin Counts: 14pos.
AWG Wire: 32
Rated Current: 1.3A Max.

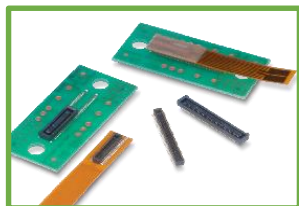
4. Camera Connection

FPC-to-Board (2 Piece)



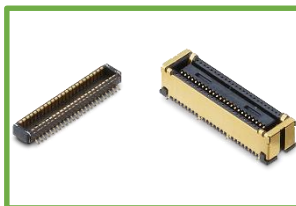
BK13

Low Height,
Hybrid Connector up to 5A
Pitch: 0.35mm
Stacking Height: 0.6mm
Depth: Plug 1.8mm
Receptacle 1.9mm
Pin Count: 10-60pos.
Rated Current: 5A for power
0.3A for signal



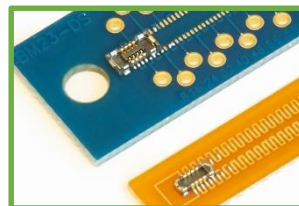
DF40

Wide Stacking Height Variety
Pitch: 0.4mm
Stacking Height: 1.5-4.0mm
Depth: 3.38mm
Pin Count: 10-120pos.
Rated Current: 0.3A



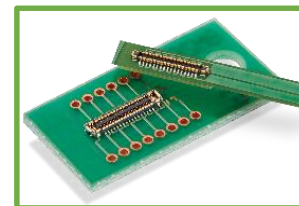
DF40G

EMI prevention with Shield
Pitch: 0.4mm
Mated Height: 1.5/3.0/3.5mm
Depth: 3.68mm
Pin Count: 10-70pos.
Rated Current: 0.3A



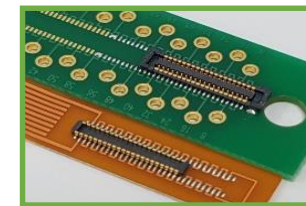
BM23FR/PF

Small-Sized, Wide Variety
Pitch: 0.35mm
Stacking Height:
FR: 0.6/0.8mm, PF: 0.8mm
Depth: 1.98mm
Pin Counts: FR: 6-60pos.
PF: 10-64+2pos.
Rated Current: FR: 0.3A
PF: 5A for power
0.3A for signal



BM28

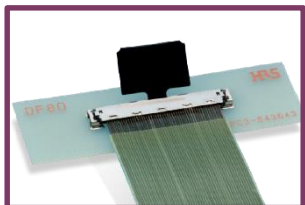
Low Profile, Space-Saving
Hybrid Connector up to 5A
Pitch: 0.35mm
Stacking Height: 0.6mm
Depth: 1.7mm
Pin Count: 6-60+2pos.
Rated Current: Power 5A
Signal 0.3A



KN13C

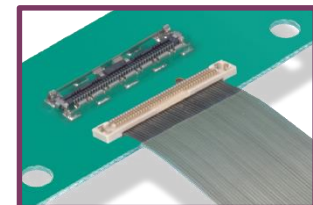
Rugged Design due to Solder Tabs
Pitch: 0.4mm
Stacking Height: 0.7mm
Depth: 2.5mm
Pin Count: 16, 24, 30pos.
Rated Current: 0.3A

Micro Coaxial Connectors



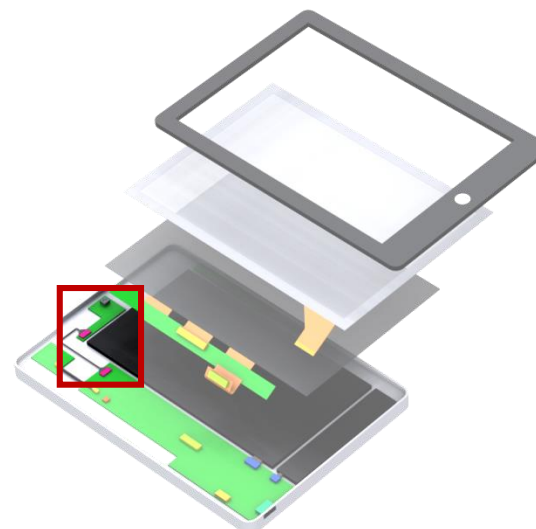
DF80

Space-Saving,
User-Friendly Operation
Pitch: 0.5mm
Mated Height: 1.72mm
Mated Depth: 5.1mm
Pin Count: 30, 40, 45, 50pos.
AWG Wire: 40-46
Discrete Wire:
32 & 36 AWG, ϕ 0.5mm Max.
Rated Current: 0.1-0.5A



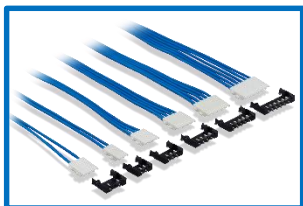
DF36

Space-Saving
Pitch: 0.4mm
Mated Height: 1.5mm
Mated Depth: 2.8/4.4mm
Pin Count: 15-50pos.
AWG wire: 42-46
Discrete Wire:
34 & 36 AWG, ϕ 0.33mm Max.
Rated Current: 0.2-0.25A



5. Battery Connection

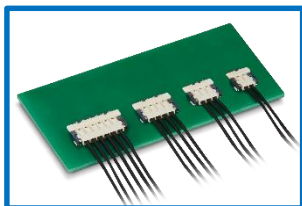
Wire-to-Board



DF57H



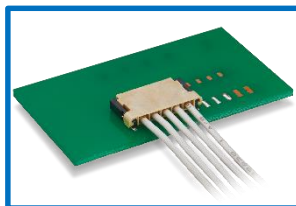
Low Profile, Snap Lock Design
Pitch: 1.2mm
Mated Height: 1.4mm
Depth: 4.65mm
Pin Count: 2-6pos.
AWG Wire: 28-34
Rated Current: 0.5-3A



DF58



World's Lowest Profile
with 28 AWG
Pitch: 1.2mm
Mated Height: 1.0mm
Depth: 4.97mm
Pin Counts: 2-6pos.
AWG Wire: 28-30
Rated Current: 1.5-3A



DF65



Small, High Current Capacity
Pitch: 1.7mm
Mated Height: 1.8mm
Mated Depth: 6.3mm
Pin Count: 3-7pos.
AWG Wire: 24-28
Rated Current: 2-4A

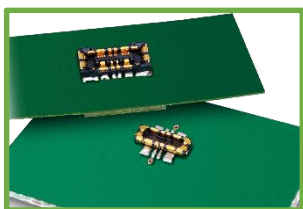


DF53



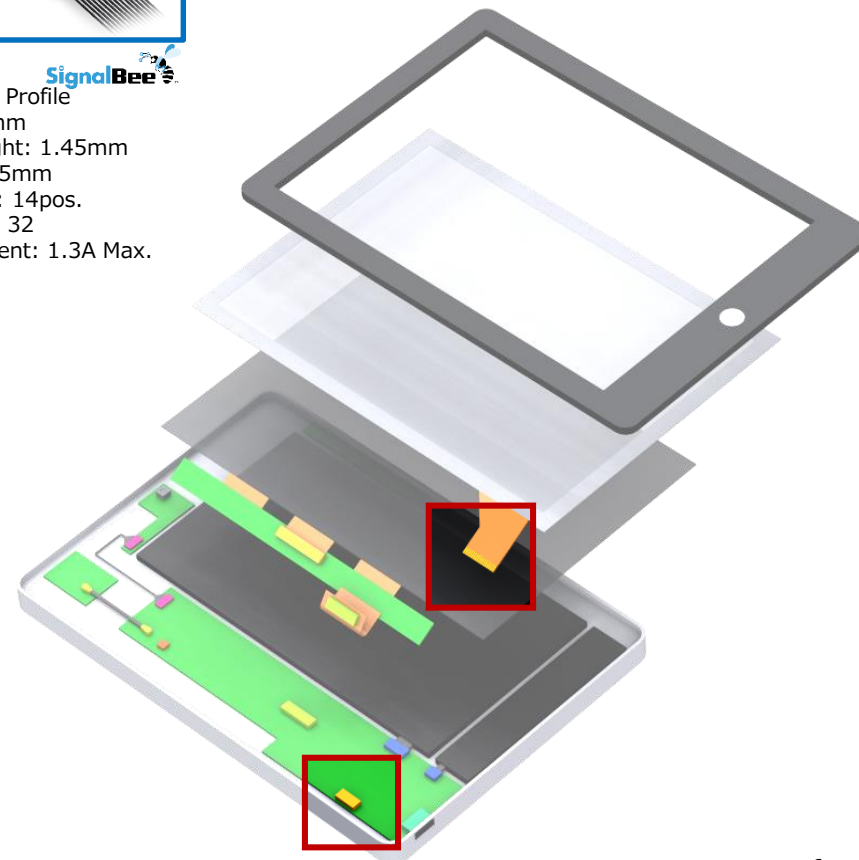
Small, Low Profile
Pitch: 0.6mm
Mated Height: 1.45mm
Depth: 3.55mm
Pin Counts: 14pos.
AWG Wire: 32
Rated Current: 1.3A Max.

FPC-to-Board (2 Piece)



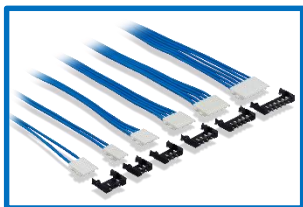
BM25

Ideal for Quick Charge
Power Connector
Pitch: 0.4mm
Mated Height: 0.7mm
Mated Depth: 2.6mm
Pin Count: 4+2pos.
Rated Current: 10A for power
0.3A for signal



6. Speaker/Microphone

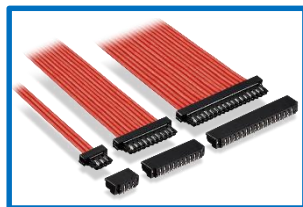
Wire-to-Board



DF57H



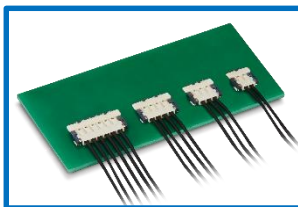
Low Profile, Snap Lock Design
Pitch: 1.2mm
Mated Height: 1.4mm
Depth: 4.65mm
Pin Count: 2-6pos.
AWG Wire: 28-34
Rated Current: 0.5-3A



DF52



Small, High Current Capacity
Pitch: 0.8mm
Mated Height: 1.75mm
Depth: 4.10mm
Pin Count: 2-20pos.
AWG Wire: 28-32
Rated Current: 0.8-2.5A



DF58



World's Lowest Profile
with 28 AWG
Pitch: 1.2mm
Mated Height: 1.0mm
Depth: 4.97mm
Pin Counts: 2-6pos.
AWG Wire: 28-30
Rated Current: 1.5-3A

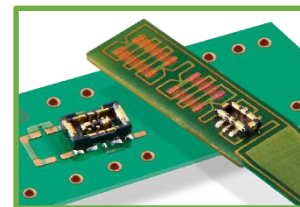


DF53



Small, Low Profile
Pitch: 0.6mm
Mated Height: 1.45mm
Depth: 3.55mm
Pin Counts: 14pos.
AWG Wire: 32
Rated Current: 1.3A Max.

FPC-to-Board (2 Piece)



BM29

Ultra Small Hybrid Connector
Pitch: 0.35mm
Mated Height: 0.6mm
Depth: 1.5mm
Pin Count: 2-24 + 2pos.
Rated Current: 3A for power
0.3A for signal

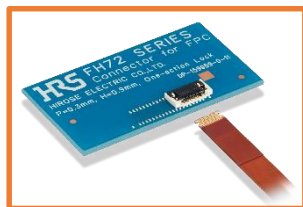
FPC Connector (1 Piece)



FH34



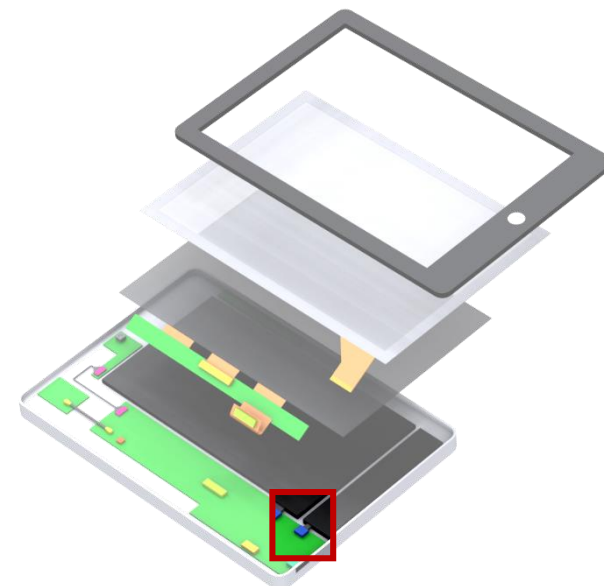
High Retention Force,
Ideal Low Pin Count
Top/Bottom Contact
Pitch: 0.5mm
Height: 1.0mm
Depth: 3.8mm
Pin Count: 4-50pos.
Rated Current: 0.5A



FH72

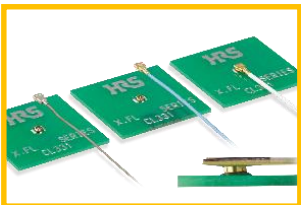


Superior Operability
(One Action)
Top Contact
Pitch: 0.3mm
Height: 0.9mm
Depth: 3.5mm
Pin Count: 11-31pos.
(Planned Development: 7-31)
Rated Current: 0.3A



7. Connectors for Antenna Connection

Miniature RF Connectors



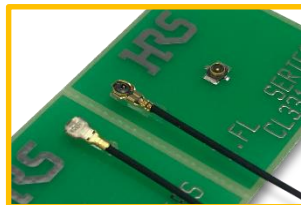
X.FL

Superior High Frequency
Mated Height: 1.0mm Max.
Frequency: DC to 6GHz
V.S.W.R.: 1.4 Max.



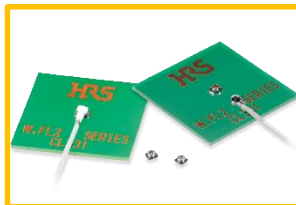
X.FL (Low Loss Type)

WiGig Standard
Mated Height: 1.3mm Max.
Frequency: DC to 12GHz
V.S.W.R.: 1.7 Max.
Intel WiGig Recommended



X.FL(V)

Superior High Frequency
Mated Height: 1mm Max.
Frequency: DC to 12GHz
V.S.W.R.: 1.6 Max.



W.FL2

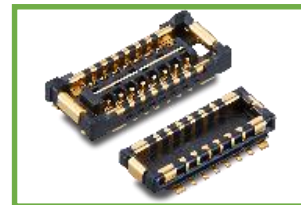
Small-Sized Connector
Mated Height: 1.3mm Max.
Frequency: DC to 6GHz
V.S.W.R.: 1.5 Max.



U.FL

Widely Used RF Connector
Mated Height: 2.0mm Max.
or 2.4-2.5 Max.
Frequency: DC to 6GHz
V.S.W.R.: 1.5 Max.

FPC-to-Board (2 Piece)



BM46

Multi-RF Board-to-Board Connector
Pitch: 0.35mm
Stacking Height: 0.6mm
Frequency: DC to 12GHz
V.S.W.R.: 1.6 Max.



RF Switch



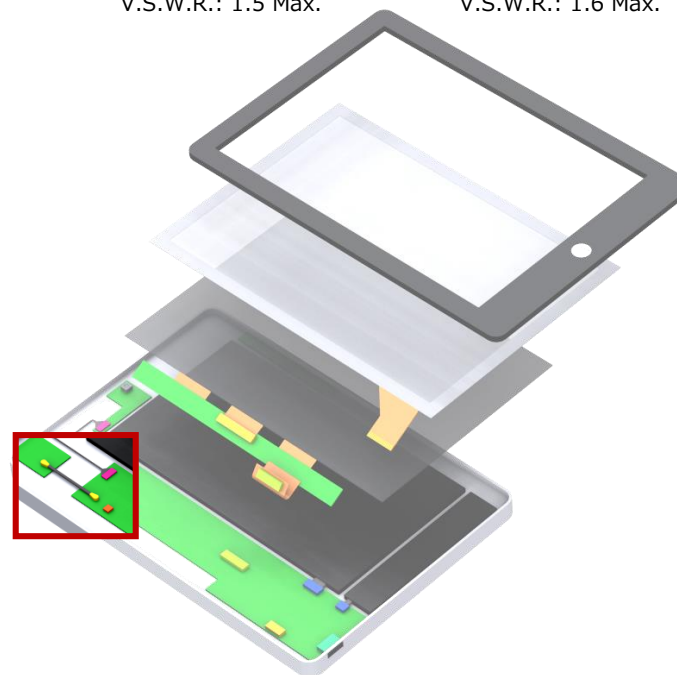
MS-156C

Widely Used RF Switch
Height: 1.35mm
Frequency: DC to 11GHz
V.S.W.R.: 1.8 Max.



MS-180

Small Switch for Checking Terminal
Height: 0.85mm
Frequency: DC to 11GHz
V.S.W.R.: 1.4 Max.



8. Interface Connection

I/O Connectors



CX90M-16P

USB Type-C Connector
USB2.0, Supports 6A
Mid-Mount, 16pos.



CX90B-16P

USB Type-C Connector
USB2.0, 5A
On-board, 16pos.



CX90MWD2G-24P

Waterproof Type-C Connector
USB3.2 Gen1, 5A
IPX8, 24pos., Mid-Mount



CX90MWP1-24P

USB Type-C Connector
USB3.2 Gen1
Mid-Mount, 24pos.
Space-Saving



CX60

USB Type-C Connector
USB4 Gen2
Space-Saving,
Short Circuit Prevention Design



ZX

Micro-USB2.0 Connector
12, 16, 20pos.



ZX62W

Micro-USB2.0 Connector
Overmolded Type
Splash Resistant Receptacle



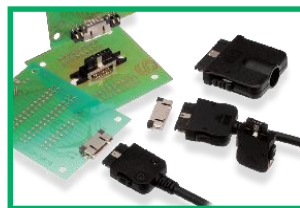
ZX360

Micro-USB3.0 Connector



LX

0.5mm Pitch, Ultra-Low Profile
12, 16, 20pos.



ST

0.5mm Pitch, Space-Saving
10, 18, 24, 36pos.

