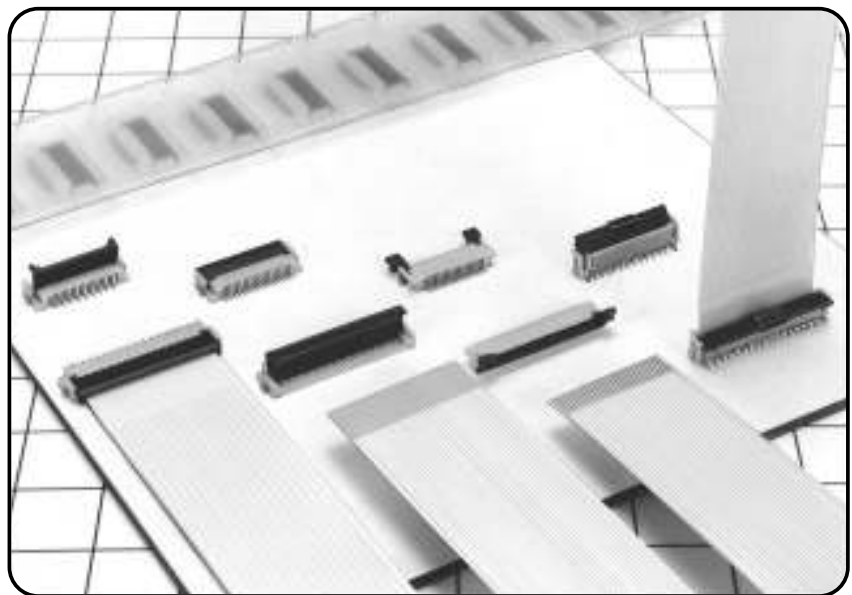
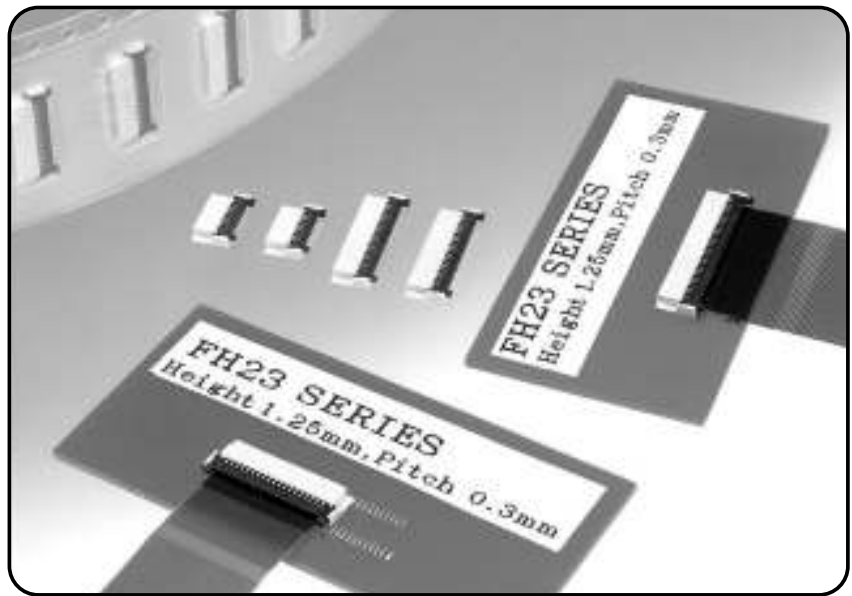


FPC/FFC Connectors



FPC/FFC Connectors



Contact Pitch (mm)	Height from board (mm)	Applicable FPC/FFC thickness (mm)	Terminal	Series Name	Page
0.3mm	0.9	0.2	Staggered row	FH25	151
	1			FH26	151
	1.25			FH23	152
	1.8			FH18	152
0.3/0.4/0.5mm	3	0.3		FH16	153
0.4mm	1.2	0.2		FH27	153
0.5mm	0.9	0.2,0.3	Single row	FH19	154
	1.3	0.17		FH17	154
	2.55			FH28	155
0.5/1.0mm	2	0.3		FH12	155

0.3mm pitch, 0.9mm above the board, FPC connectors

FH25 Series



Features

- Low profile 0.3mm pitch flexible printed circuit (FPC) connectors.
- All bottom surface of the connector with no pattern-prohibited area (i.e., over-molding structure).
- The 0.3mm width staggered pin design with a mounting pitch of 0.6mm ensures mounting area reduction and easy mounting.
- Only slight force is required to lock the flip-lock (one-touch rotating system) zero insertion force (ZIF) structure.
- FPC 0.2mm thickness applicable, standard FPC thickness in the market despite its low profile.

Applications

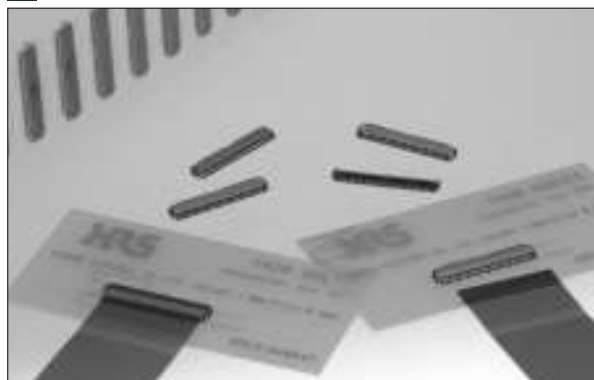
Mobile phone, LCD application, Digital video camera (DVC), Digital camera (DSC), PDA, Camera module, Compact electronic equipment

Specifications

Item	Requirements
No. of Positions	21-27-33-39-45-51
Current rating (A)	0.15
PCB Mount Type	SMT
Contact Plating	Gold, tin-lead
Terminal Pitch (mm)	0.6
Contact Pitch (mm)	0.3
Contact Layout	Double row
Operating Temperature Range (°C)	-55 to 85
Insulator	LCP (UL94V-0, Color: Black, Dark brown)
Applicable FPC/FFC (mm)	0.2
Remarks	FPC connector

0.3mm pitch, 1mm above the board, FPC connectors

FH26 Series



Features

- Space saving design:connector height is 1.0mm and depth of mounting area is 3.2mm.
- The soldering leads are on 0.6mm terminal spacing, existing on front and back of the connector, for easy solderability on the PCB.
- Board area under the connector is available for PCB patterning.
- Flip lock actuator allows easy insertion of FPC.
- Metal FPC insertion guide makes easy to insert FPC.

Applications

Mobile phone, LCD application, Digital video camera (DVC), Digital camera (DSC), PDA, Camera module, Compact electronic equipment

Specifications

Item	Requirements
No. of Positions	13-21-23-25-27-33-35-39-41-45-51-57-71
Current rating (A)	0.2
PCB Mount Type	SMT
Contact Plating	Gold, tin-lead
Terminal Pitch (mm)	0.6
Contact Pitch (mm)	0.3
Contact Layout	Double row
Operating Temperature Range (°C)	-55 to 85
Insulator	LCP (UL94V-0, Color: Black, Dark brown)
Applicable FPC/FFC (mm)	0.2
Remarks	FPC connector

0.3mm pitch, 1.25mm above the board, FPC connectors

FH23 Series



Features

- HIROSE's unique low insertion force (LIF) design improves the Flexible Printed Circuit (FPC) holding force after insertion.
- Provided with an flexible printed circuit (FPC) temporary hold mechanism, thus preventing the shift of the flexible printed circuit (FPC) and connector after flexible printed circuit (FPC) insertion.
- The staggered pin design with a mounting pitch of 0.6mm ensures ease of mounting.
- Only slight force is required to lock the flip-lock (one-touch rotating type) zero insertion force (ZIF) structure.

Applications

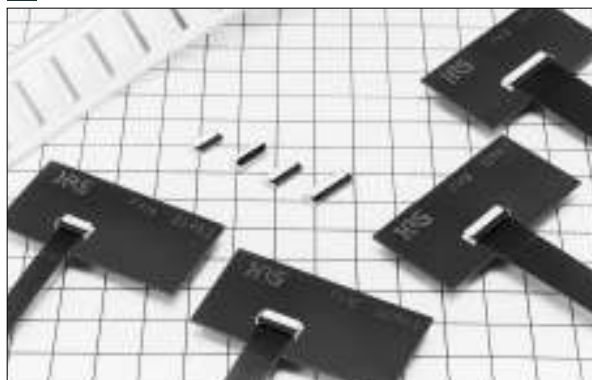
Mobile Phones, LCD units, DVC units, DSC units, PDA units, Camera modules, Compact equipment

Specifications

Item	Requirements
No. of Positions	15-17-21-23-25-27-31-33-39-45-51-61-71
Current rating (A)	0.3
PCB Mount Type	SMT
Contact Plating	Gold, tin-lead
Terminal Pitch (mm)	0.6
Contact Pitch (mm)	0.3
Contact Layout	Double row
Operating Temperature Range (°C)	-55 to 85
Insulator	LCP (UL94V-0, Color: Black, beige)
Applicable FPC/FFC (mm)	0.2
Remarks	FPC connector

0.3mm pitch FPC connectors

FH18 Series



Features

- Low profile 0.3mm pitch flexible printed circuit (FPC) connectors.
- A combination of non-ZIF and zero insertion force (ZIF) contacts improves an increase in reliability and workability at the time of flexible printed circuit (FPC) insertion.
- Only slight force is required to lock the flip-lock (one-touch rotating type) zero insertion force (ZIF) structure.
- The staggered pin design with a mounting pitch of 0.6mm ensures ease of mounting.
- Embossed tape packaging allows automatic mounting.

Applications

Digital camcorders, Digital still cameras, Cameras, PDA units, Mobile Phones, LCD units, CD-ROM drives, DVD-ROM drives, MD players, Compact equipment

Specifications

Item	Requirements
No. of Positions	17-21-25-27-39-45-51
Current rating (A)	0.15
PCB Mount Type	SMT
Contact Plating	Gold, tin-lead
Terminal Pitch (mm)	0.6
Contact Pitch (mm)	0.3
Contact Layout	Double row
Operating Temperature Range (°C)	-40 to 85
Insulator	LCP (UL94V-0, Color: Black, beige)
Applicable FPC/FFC (mm)	0.2
Remarks	FPC connector

High density FPC connectors (0.3mm/0.4mm/0.5mm pitch)**FH16 Series****Features**

- The FH16 series is a fine pitch of 0.3mm, 0.4mm, and 0.5mm ensures high density mounting of multipole connectors.
- Only slight force is required to lock the flip-lock (one-touch rotating type) zero insertion force (ZIF) structure.
- The locking mechanism clicks, thus making it possible to confirm secure flexible printed circuit (FPC) connections.
- Prevents flexible printed circuit (FPC) from falling out and oblique mating.
- The staggered pin design with a mounting pitch of 0.6mm ensures ease of mounting.

Applications

Notebook PCs, CD-ROM drives, Digital cameras, Printers, Compact equipment

Specifications

Item	Requirements
No. of Positions	50-60-64-80-90-96
Current rating (A)	0.15-0.3-0.4
PCB Mount Type	SMT
Contact Plating	Gold, tin-lead
Terminal Pitch (mm)	0.6-0.8-1
Contact Pitch (mm)	0.3-0.4-0.5
Contact Layout	Double row
Operating Temperature Range (°C)	-40 to 70
Insulator	Polyamide, LCP (UL94V-0, Color: Beige), PPS (UL94V-0, Color: Dark brown)
Applicable FPC/FFC (mm)	0.3
Remarks	FPC connector

0.4mm pitch, 1.2mm above the board, FPC connectors**FH27 Series****Features**

- Low profile 0.4mm pitch flexible printed circuit (FPC) connectors.
- Higher current capacity than 0.3mm pitch FPC.
- Function to prevent flexible printed circuit (FPC) from falling out.
- FPC of 0.2mm thickness is applicable and easy to insert.
- Only slight force is required to lock the flip-lock (one-touch rotating system) zero insertion force (ZIF) structure.

Applications

Mobile phone, LCD application, Digital video camera (DVC), Digital camera (DSC), PDA, Camera module, Compact electronic equipment

Specifications

Item	Requirements
No. of Positions	10-40-50-54-57-60
Current rating (A)	0.4
PCB Mount Type	SMT
Contact Plating	Gold, tin-lead
Terminal Pitch (mm)	0.4
Contact Pitch (mm)	0.4
Contact Layout	Single row
Operating Temperature Range (°C)	-55 to 85
Insulator	LCP (UL94V-0, Color: Black, beige)
Applicable FPC/FFC (mm)	0.2
Remarks	FPC connector

Circular Connectors

Rectangular Connectors

Coaxial Connectors

Memory Card

Modular Connectors

Card Edge Connectors

Board-to-Board Connectors

Board-to-Wire Connectors

FPC/FFC Connectors

Optical Connectors and Devices

Microwave Components

0.5mm pitch, 0.9mm above the board, FPC/FFC connectors**FH19 Series****Features**

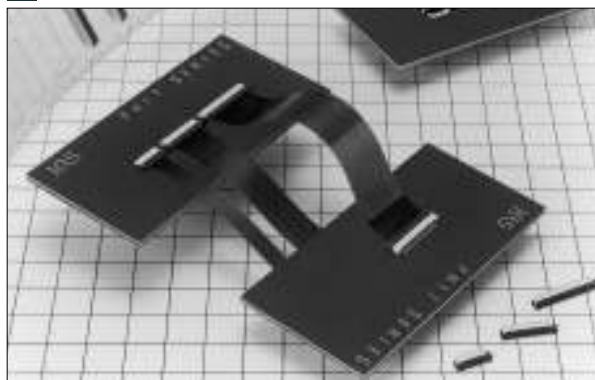
- Low profile 0.5mm pitch flexible printed circuit (FPC) connectors.
- The embossed tape reels made of paper.
- All bottom surface of the connector with no pattern-prohibited area (i.e., over-molding structure).
- Only slight force is required to lock the flip-lock (one-touch rotating type) zero insertion force (ZIF) structure.
- Accepting 0.2mm and 0.3mm thick flexible printed circuit (FPC), flexible flat cable (FFC), thus ensuring ease of insertion.

Applications

Mobile Phones, LCD units, DVC units, DSC units, PDA units, Camera modules, Compact equipment

Specifications

Item	Requirements
No. of Positions	4-5-6-8-9-10-12-13-14-15-16-17-18-20-21-22-24-26-27-30-32-40-45-50
Current rating (A)	0.5
PCB Mount Type	SMT
Contact Plating	Gold, tin-lead
Terminal Pitch (mm)	0.5
Contact Pitch (mm)	0.5
Contact Layout	Single row
Operating Temperature Range (°C)	-55 to 85
Insulator	LCP (UL94V-0, Color: Beige), PPS (UL94V-0, Color: Black, dark brown)
Applicable FPC/FFC (mm)	0.2-0.3
Remarks	FPC/FFC connector

0.5mm pitch FPC connectors**FH17 Series****Features**

- Low profile 0.5mm pitch flexible printed circuit (FPC) connectors. An ultra miniature version of the FH12 Series.
- Only slight force is required to lock the flip-lock (one-touch rotating type) zero insertion force (ZIF) structure.
- PCB drop-in type as a variation is available.
- Conforming to the thin type flexible printed circuit (FPC) now being used for small size electronic devices such as cameras.
- Embossed tape packaging allows automatic mounting.

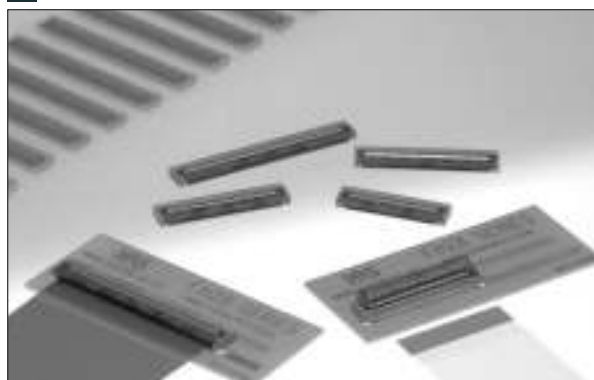
Applications

Mobile Phones, LCD-related applications, CD-ROM drives, Camera, Compact equipment

Specifications

Item	Requirements
No. of Positions	8-10-15-20-24-30
Current rating (A)	0.4
PCB Mount Type	SMT
Contact Plating	Tin-lead
Terminal Pitch (mm)	0.5
Contact Pitch (mm)	0.5
Contact Layout	Single row
Operating Temperature Range (°C)	-40 to 70
Insulator	LCP (UL94V-0, Color: Black, beige), PPS (UL94V-0, Color: Black)
Applicable FPC/FFC (mm)	0.17
Remarks	FPC connector

0.5mm pitch, 2.55mm above the board, FPC/FFC connectors FH28 Series



Features

- Stabilized connection quality by easy FPC positioning and high FPC retention force by robust lock structure.
- Greatly enhanced FPC/FFC retention force.
- Easy-to-use 0.3 mm thick FPC/FFC.
- High FPC operational reliability, achieved by user-friendly actuator operation.

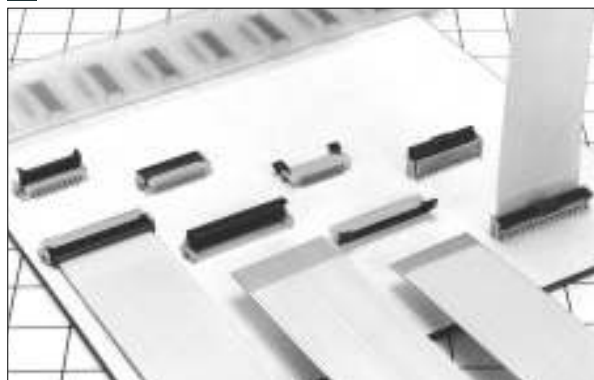
Applications

LCD, PDP, HDD, FPC multipole connection equipment

Specifications

Item	Requirements
No. of Positions	34-40-48-50-55-60-62-64-80
Current rating (A)	0.5
PCB Mount Type	SMT
Contact Plating	Gold, tin-lead
Terminal Pitch (mm)	0.5
Contact Pitch (mm)	0.5
Contact Layout	Single row
Operating Temperature Range (°C)	-40 to 85
Insulator	LCP (UL94V-0, Color: Black, Gray)
Applicable FPC/FFC (mm)	0.3
Remarks	FPC/FFC connector

0.5mm and 1mm pitch FPC/FFC connectors FH12 Series



Features

- Only slight force is required to lock the flip-lock (one-touch rotating type) zero insertion force (ZIF) structure.
- The locking mechanism clicks, thus making it possible to confirm flexible printed circuit (FPC) and flexible flat cable (FFC) connections.
- One-touch zero insertion force (ZIF) structure reduces working space, thus making mounting possible in the center of the PCB.
- Upper, lower, and vertical contact types for flexible printed circuit (FPC) and flexible flat cable (FFC) connections are available.
- Models of 1mm pitch type as well as 0.5mm pitch type are available.

Applications

LCDs, Mobile Phones, CD-ROM drives, Compact equipment

Specifications

Item	Requirements
No. of Positions	4-5-6-7-8-9-10-11-12-13-14-15-16-17-18-19-20-22-24-25-26-28-29-30-32-33-34-36-40-42-45-49-50-53
Current rating (A)	0.4
PCB Mount Type	SMT
Contact Plating	Gold, tin-lead
Terminal Pitch (mm)	0.5-1-2
Contact Pitch (mm)	0.5, 1
Contact Layout	Single row
Operating Temperature Range (°C)	-40 to 70
Insulator	Polyamide (UL94V-0, Color: Beige), PPS (UL94V-0, Color: Dark brown)
Applicable FPC/FFC (mm)	0.18-0.3
Remarks	FPC/FFC connector

Circular Connectors

Rectangular Connectors

Coaxial Connectors

Memory Card

Modular Connectors

Card Edge Connectors

Board-to-Board Connectors

Board-to-Wire Connectors

FPC/FFC Connectors

Optical Connectors and Devices

Microwave Components