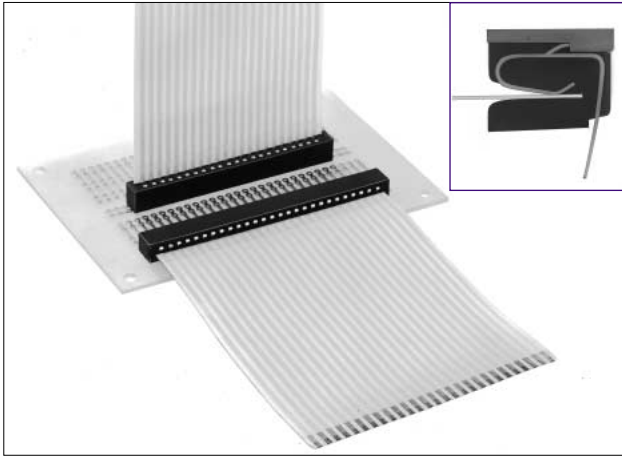


# 2.54mm Pitch Miniature Connector for Flexible Board

## FH1 Series



### ■ Features

#### 1. 2.54mm FPC and FFC Connector

The contact pitch is 2.54mm.

#### 2. Contact Reliability

This connector assures high contact reliability for high voltage contact.

#### 3. Eighteen Types of Contact Numbers

This connector consists of 18 kinds of 8, 9, 10, 11, 12, 13, 14, 15, 15, 17, 18, 19, 20, 21, 22, 27, and 29 contacts.

### ■ Applications

HDD, facsimiles, printers, VTR, etc.

### ■ Product Specifications

Rating	Rated Current: 1A	Operating Temperature Range: -40~+85°C (Note 1)	Storage Temperature Range: -10~+60°C (Note 2)
	Rated Voltage: 200V AC	Operating Humidity Range: Relative humidity, 90% max. (Not dewed)	Storage Humidity Range: Relative humidity, 90% max. (Not dewed)

Applicable FPC	t=0.13~0.3 Tin plating
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Item	Specification	Condition
1. Insulation Resistance	5000MΩ min.	Measured at 500V DC
2. Withstand voltage	Neither short or breakdown should occur.	500V AC for 1 minute
3. Contact Resistance	20mΩmax. ※ FPC conductor resistance included	Measured at DC 1A
4. Mechanical operation	Contact resistance : 40mΩ max. No part should be broken, cracked or loosened	30 cycles
5. Vibration	No part should be broken, cracked or loosened	Frequency: 10~55Hz and full amplitude 1.50mm in 3 directions for 2 hours, respectively
6. Shock	No part should be broken, cracked or loosened	Acceleration: 490m/S <sup>2</sup> , duration: 11ms, sine half-wave: in 3 directions for 3 times, respectively
7. Moisture Resistance in Steady State	Insulation resistance: 500MΩ min.	Exposed to temperature 40°C and humidity 90~95% for 96 hours
8. Temperature Cycle	No part should be broken, cracked or loosened	5 cycles under conditions as follows; Temperature: -55°C → +5~+35 → 85 → +5~+35°C Time: 30 → 10~15 → 30~10~15 minutes
9. Resistance to Soldering heat	Neither appearance should be deformed nor contact remarkably loosened.	Automatic soldering: 260°C <sub>æ</sub> for 10 seconds

Note 1. Temperature rise included when energized

Note 2. This storage indicates a long-term storage state for the unused product before board mounted.

The operating temperature and humidity ranges are applied to the non-energized state after the connector has been installed in the board.

Note 3. The above standards represent this series. The individual formal agreement should be based on the "Specification".

## Material

Part	Material	Finish	Remarks
Insulator	PBT	Black	UL94V-0
Contact	Phosphor bronze	Tin plating	_____

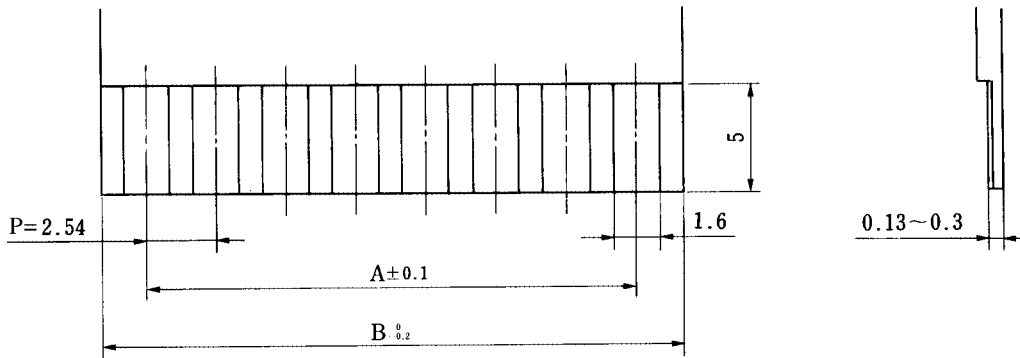
## Ordering Information

Please determine the specific product. If needed, please select and order the product from the product No. as listed on catalog page D4 and D5.

**FH 1 - 17 S -2.54 DS**  
q w e r t y

<b>q</b> Series Name : FH	<b>r</b> Contact alignment : Single
<b>w</b> Series No. : 1	<b>t</b> Contacts Pitch : 2.54mm
<b>e</b> Number of Contacts : 6, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 27, 29	<b>y</b> Contact Type : DS : Right angle type DSA : Straight type

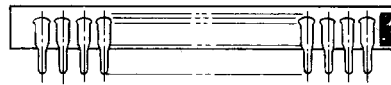
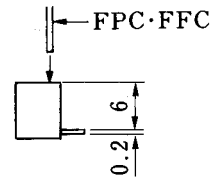
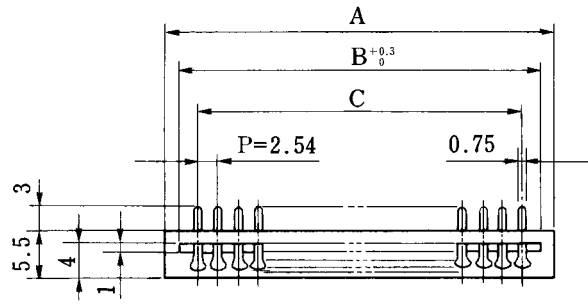
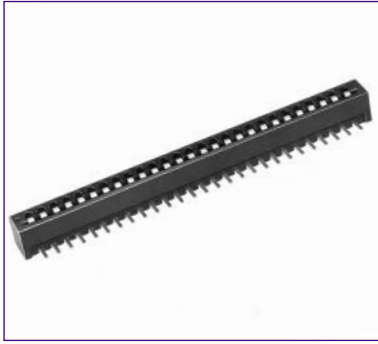
## FPC · FFC Dimensions



Unit: mm

Size \ Number of Contacts	Number of Contacts																	
	5	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	27	29
A	10.16	17.78	20.32	22.86	25.40	27.94	30.48	33.02	35.56	38.10	40.64	43.18	45.72	48.26	50.80	53.34	66.04	71.12
B	15.29	22.91	25.45	27.99	30.53	33.07	35.61	38.15	40.69	43.23	45.77	48.31	50.85	53.39	55.93	58.47	69.90	76.25

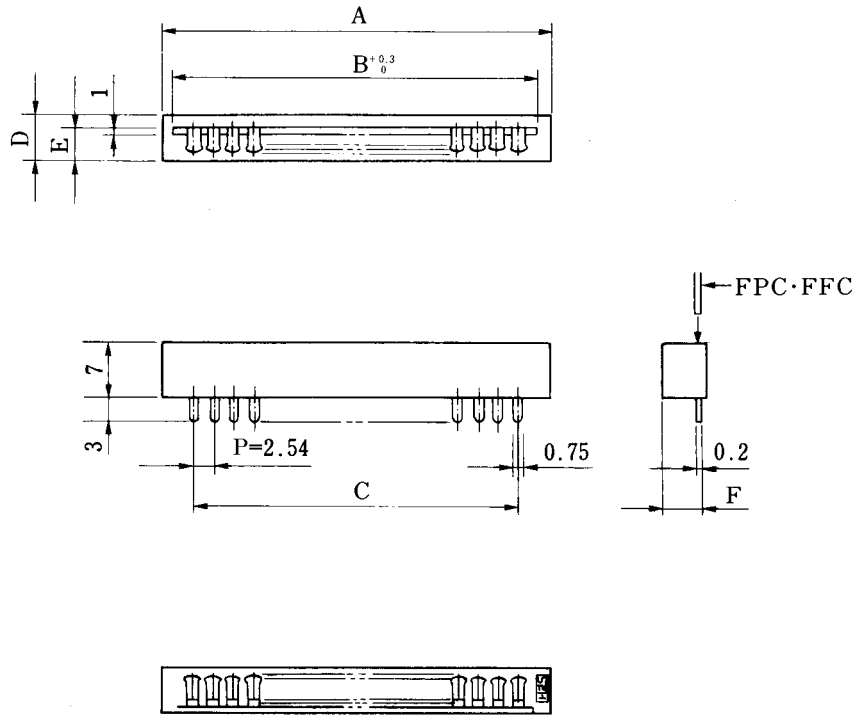
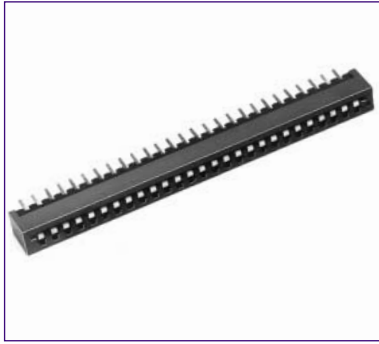
## Right Angle Type



Unit:mm

Product No.	HRS No.	Number of Contacts	A	B	C
FH1- 8S-2.54DS	CL586-0015-5	8	26.0	23.01	17.78
FH1- 9S-2.54DS	CL586-0016-8	9	28.5	25.55	20.32
FH1-10S-2.54DS	CL586-0017-0	10	31.0	28.09	22.86
FH1-11S-2.54DS	CL586-0018-3	11	33.6	30.63	25.40
FH1-12S-2.54DS	CL586-0019-6	12	36.1	33.17	27.94
FH1-13S-2.54DS	CL586-0020-5	13	38.7	35.71	30.48
FH1-14S-2.54DS	CL586-0027-4	14	41.3	38.25	33.02
FH1-15S-2.54DS	CL586-0028-7	15	43.8	40.79	35.56
FH1-16S-2.54DS	CL586-0029-0	16	46.3	43.33	38.10
FH1-17S-2.54DS	CL586-0001-0	17	48.8	45.87	40.64
FH1-18S-2.54DS	CL586-0002-3	18	51.4	48.41	43.18
FH1-19S-2.54DS	CL586-0003-6	19	53.9	50.95	45.72
FH1-20S-2.54DS	CL586-0004-9	20	56.4	53.49	48.26
FH1-21S-2.54DS	CL586-0005-1	21	59.0	56.03	50.80
FH1-22S-2.54DS	CL586-0006-4	22	61.5	58.57	53.34
FH1-27S-2.54DS	CL586-0007-7	27	73.0	70.00	66.04

## ■Straight Type



Unit: mm

Product No.	HRS No.	Number of Contacts	A	B	C	D	E	F
FH1- 5S-2.54DSA	CL586-0036-5	5	18.3	15.39	10.16	5.5	4	4.5
FH1- 8S-2.54DSA	CL586-0021-8	8	26.0	23.01	17.78	5.5	4	4.5
FH1-10S-2.54DSA	CL586-0023-3	10	31.0	28.09	22.86	5.5	4	4.5
FH1-11S-2.54DSA	CL586-0024-6	11	33.6	30.63	25.40	5.5	4	4.5
FH1-12S-2.54DSA	CL586-0025-9	12	36.1	33.17	27.94	5.5	4	4.5
FH1-13S-2.54DSA	CL586-0026-1	13	38.7	35.71	30.48	5.5	4	4.5
FH1-14S-2.54DSA	CL586-0030-9	14	41.3	38.25	33.02	5.5	4	4.5
FH1-15S-2.54DSA	CL586-0031-1	15	43.8	40.79	35.56	5.5	4	4.5
FH1-16S-2.54DSA	CL586-0032-4	16	46.3	43.33	38.10	5.5	4	4.5
FH1-17S-2.54DSA	CL586-0008-0	17	48.8	45.87	40.64	5.5	4	4.5
FH1-18S-2.54DSA	CL586-0009-2	18	51.4	48.41	43.18	5.5	4	4.5
FH1-19S-2.54DSA	CL586-0010-1	19	53.9	50.95	45.72	5.5	4	4.5
FH1-20S-2.54DSA	CL586-0011-4	20	56.4	53.49	48.26	5.5	4	4.5
FH1-21S-2.54DSA	CL586-0012-7	21	59.0	56.03	50.80	5.5	4	4.5
FH1-22S-2.54DSA	CL586-0013-0	22	61.5	58.57	53.34	5.5	4	4.5
FH1-27S-2.54DSA	CL586-0014-2	27	73.0	70.00	66.04	5.5	4	4.5
FH1-29S-2.54DSA	CL586-0037-8	29	79.3	76.35	71.12	6.0	4.5	5.0