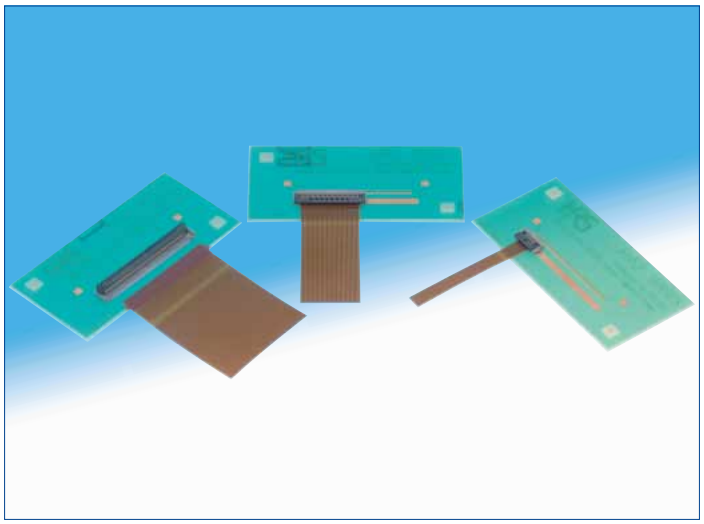
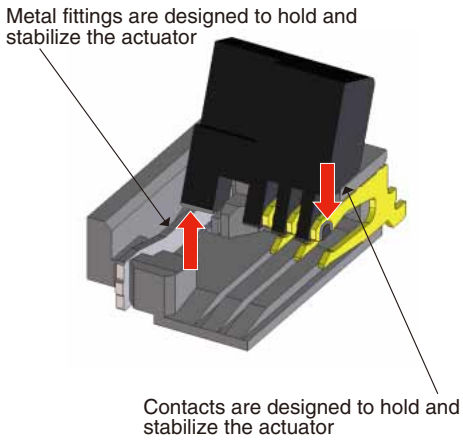
0.5mm and 1mm Pitch, 2mm Height, FPC/FFC ZIF Connectors

FH52 Series



Secure actuator retention



■Features

1. Highly reliable connection and robust structure

With the need for higher contact counts and the need for a connector body that delivers unquestionable strength and a reliable connection in a FPC/FFC connector, the FH52 series has made great strides to meet this need. It meets this need with the following:
-An FPC positioning mechanism that delivers the high reliability requested
-A reliable and secure connection that is packed into a well-designed, durable structure.

2. Product variations capable of meeting a range of needs

・FH52E : Long metal fittings type
Easy visual inspection of solder posts after processing.
・FH52K : Long metal fittings type, 125℃ Heat Resistant Type
125℃ heat resistant connector meets severe automotive requirements
・FH52T : Long metal fittings type, 2-Point Contact Type
Contact structure with independent springs connects with FPC/FCC at 2 points reducing failure from dust intrusion.

3. Simplified operations

The flip lock structure makes it easier to engage/disengage the actuator and reduces the required force needed to operate. A clear tactile click is delivered upon the successful completion of the mating process.

4. Increased retention force

The side catch technology combined with tabbed FPC/FFC increase the horizontal retention force of the FPC/FFC.

5. Accepts standard 0.3mm thick FPC/FFC

It accepts 0.3mm thick products that are easy to manufacture and have superb insertion performance.

6. Fully molded structure aids PCB layout

The bottom of this connector is enclosed by a fully molded structure that protects the contacts and removes any restrictions from PCB patterning and design.

7. Halogen-free

All materials and substances used to produce this product comply with Halogen-free standards.* As defined in IEC 61249-2-21. Br : 900 ppm or less, Cl : 900 ppm or less, Br+Cl : 1,500 ppm or less

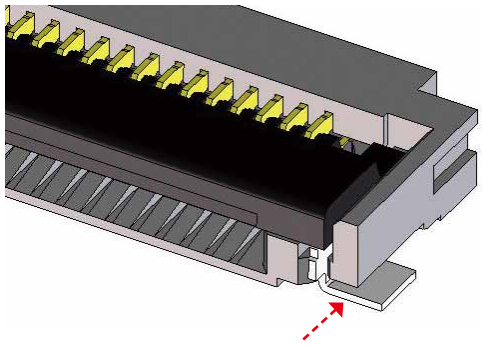
8. Supports automatic pick-n-place mounting

Offered in tape and reel packaging that is compatible with automatic machine mounting. (3,000pcs/reel)

9. Multiple packing options

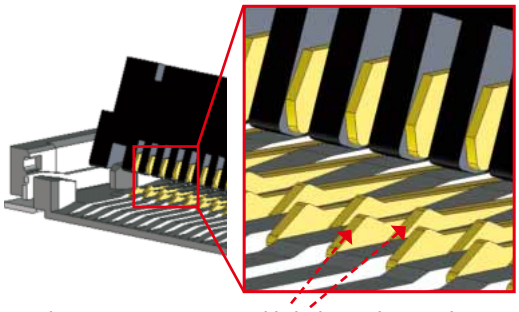
The standard packaging is 3,000pcs/reel, but it is also offered in a 500pcs/reel. (The outer diameter of the reel will be ϕ180mm in this case.)

Extended metal fitting option (FH52E/FH52K/FH52T)



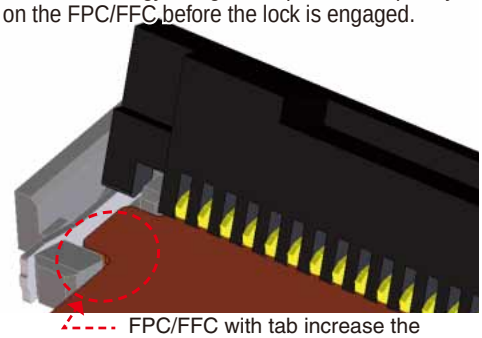
The metal fittings extend out from the connector body to enable a visual inspection of its soldering conditions.

2-Points of Contact (FH52T)



2-point contact structure with independent springs to improve reliability.

Side catch technology designed to place a temporary hold on the FPC/FFC before the lock is engaged.



FPC/FFC with tab increase the retention force in horizontal direction.

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■Product Specifications

Rating	Rated current 0.5A (Note 1) Rated voltage 50V AC rms	Operating temperature range : -40℃ to +105°C (Note 2)(Note 4) Operating humidity range : Relative humidity 90% max. (No condensation)	Storage temperature range : -10℃ to +50°C (Note 3) Storage humidity range : Relative humidity 90% max. (No condensation)

Adaptive FPC/FFC contact specifications	Thickness: = 0.3 ± 0.05mm Gold plated contact traces

Item	Specification	Conditions
1. Insulation resistance	500MΩ min.	100V DC
2. Withstanding voltage	No flashover or insulation breakdown	150V AC rms / 1 minute
3. Contact resistance	50mΩ max. ✻ Including FPC/FFC conductor resistance	1mA (DC or 1000Hz)
4. Durability (insertion / withdrawal)	Contact resistance : 50mΩ max. No damage, cracks, or parts dislocation	20 cycles
5. Vibration	No electrical discontinuity of 1μs or more Contact resistance : 50mΩ max. No damage, cracks, or parts dislocation	Frequency : 10 to 55Hz, single amplitude of 0.75mm, 10 cycles in each of the 3 directions
6. Shock	No electrical discontinuity of 1μs or more Contact resistance : 50mΩ max. No damage, cracks, or parts dislocation	Acceleration of 981m/s², duration of 6 ms, sine half-wave waveform, 3 cycles in each of the 3 axes
7. Humidity (Steady state)	Contact resistance : 50mΩ max. Insulation resistance : 50MΩ min. No damage, cracks, or parts dislocation	96 hours at temperature of 40℃ and humidity of 90% to 95%
8. Temperature cycle	Contact resistance : 50mΩ max. Insulation resistance : 50MΩ min. No damage, cracks, or parts dislocation	Temperature : -40°C → +15℃ to +35℃ → +105℃(Note 4) → +15℃ to +35℃ Time : 30 → 2 to 3 → 30 → 2 to 3 (Minutes) 5 cycles
9. Resistance to soldering heat	No deformation of components affecting performance	Reflow : Peak temperature 250°C max., 230°C or more, 30 seconds or less Manual soldering: 350 ± 10°C for 5 seconds

Note 1 : When passing the current through all of the contacts, use 70% of the current rating.
Note 2 : Includes temperature rise caused by current flow.
Note 3 : The term “storage” refers to products stored for long period of time prior to mounting and use. Operating Temperature Range and Humidity Range covers non-conducting condition of installed connectors in storage, shipment or during transportation.
Note 4 : FH52K withstands up to +125°C.

■Materials / Finish

Part	Material	Finish	Remarks
Insulator	LCP	Color : Grey	UL94V-0
		Color : Black	
Contacts	Copper alloy	Partially gold plated	———
Metal fittings	Brass	Tine plated	

■Product Number Structure

Refer to the chart below when datermining the product specifications from the product number.
Please select from the product numbers listed in this catalog when placing orders.

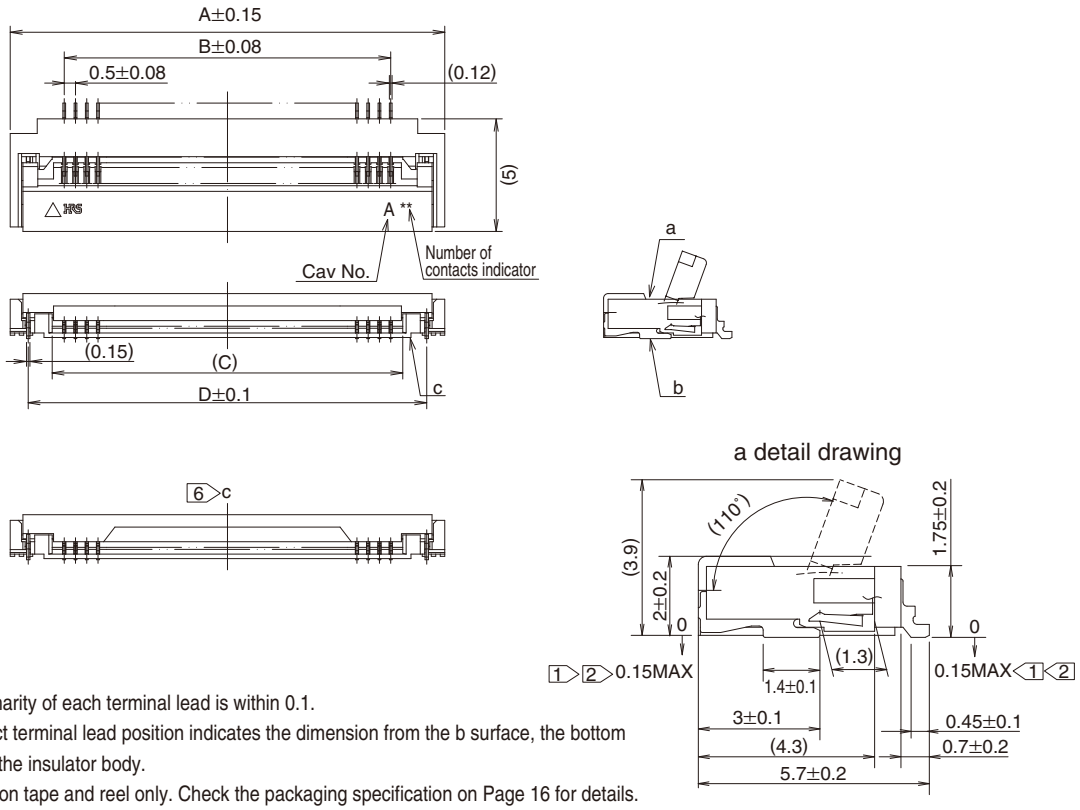
FH 52 E – 50 (25) S B – 0.5 SH (99)
❶ ❷ ❸ ❹ ❺ ❻ ❼ ❽ ❾ ❿

❶ Series name : FH	❻ Contact arrangement : Single (pole piece array)
❷ Series No. : 52	❼ Alternating direction : No symbol : Standard type (all contacts loaded) A : Alternating contact type (Alternating on the polarity side) B : Alternating contact type (Alternating on the opposite polarity side)
❸ Blank : Standard type E : Long metal fittings type K : Long metal fittings type, +125°C Heat Resistant type T : Long metal fittings type, 2-Point Contact type	❽ Contact pitch : 0.5mm, 1mm
❹ Standard type : Number of contacts Alternating contact type : Mold size	❾ Termination type SH : SMT horizontal mounting type
❺ Standard type : No symbol Alternating contact type : Number of contacts	❿ SpecificationBlank : Partially gold plated, 3,000pcs/reel (99) : Partially gold plated, 500pcs/reel

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■Connector Dimensions

[FH52 (Standard Type) 0.5mm Pitch product]



Notes 1 The coplanarity of each terminal lead is within 0.1.
2 The contact terminal lead position indicates the dimension from the b surface, the bottom surface of the insulator body.
3 Packaged on tape and reel only. Check the packaging specification on Page 16 for details.
4 Sink mark reliefs may be added due to improvements
5 Sight variations in color of the plastic compounds do not affect form, fit or function.
After reflow, the terminal plating may change color; however this does not represent a quality issue.
6 The dimensions of 60-contact actuators are shown in the figures.

Unit : mm

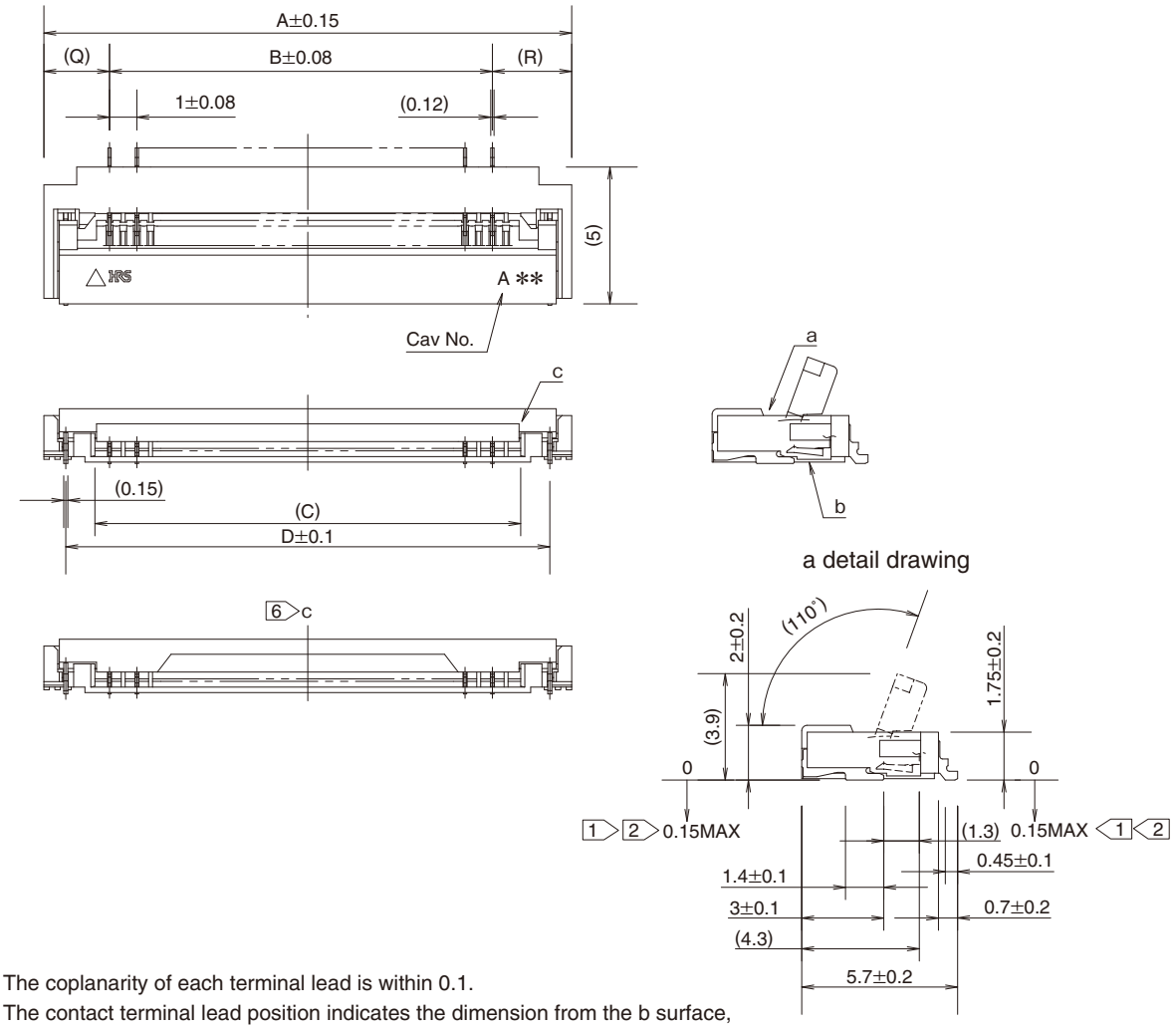
Part No.	HRS No.	No. of contacts	A	B	C	D
FH52-4S-0.5SH(**)	Under planning (Note 2)	4	6.3	1.5	2.57	4.7
FH52-5S-0.5SH(**)		5	6.8	2.0	3.07	5.2
FH52-6S-0.5SH(**)	580-3304-0 **	6	7.3	2.5	3.57	5.7
FH52-8S-0.5SH(**)	580-3305-3 **	8	8.3	3.5	4.57	6.7
FH52-10S-0.5SH(**)	580-3306-6 **	10	9.3	4.5	5.57	7.7
FH52-11S-0.5SH(**)	580-3320-7 **	11	9.8	5.0	6.07	8.2
FH52-12S-0.5SH(**)	580-3307-9 **	12	10.3	5.5	6.57	8.7
FH52-15S-0.5SH(**)	580-3302-5 **	15	11.8	7.0	8.07	10.2
FH52-16S-0.5SH(**)	Under planning (Note 2)	16	12.3	7.5	8.57	10.7
FH52-18S-0.5SH(**)	580-3321-0 **	18	13.3	8.5	9.57	11.7
FH52-20S-0.5SH(**)	580-3309-4 **	20	14.3	9.5	10.57	12.7
FH52-22S-0.5SH(**)	580-3317-2 **	22	15.3	10.5	11.57	13.7
FH52-24S-0.5SH(**)	580-3318-5 **	24	16.3	11.5	12.57	14.7
FH52-25S-0.5SH(**)	580-3316-0 **	25	16.8	12.0	13.07	15.2
FH52-26S-0.5SH(**)	580-3319-8 **	26	17.3	12.5	13.57	15.7
FH52-28S-0.5SH(**)	580-3324-8 **	28	18.3	13.5	14.57	16.7
FH52-30S-0.5SH(**)	580-3310-3 **	30	19.3	14.5	15.57	17.7
FH52-32S-0.5SH(**)	580-3325-0 **	32	20.3	15.5	16.57	18.7
FH52-40S-0.5SH(**)	580-3300-0 **	40	24.3	19.5	20.57	22.7
FH52-42S-0.5SH(**)	580-3329-1 **	42	25.3	20.5	21.57	23.7
FH52-45S-0.5SH(**)	580-3311-6 **	45	26.8	22.0	23.07	25.2
FH52-50S-0.5SH(**)	580-3303-8 **	50	29.3	24.5	25.57	27.7
FH52-60S-0.5SH(**)	580-3301-2 **	60	34.3	29.5	30.57	32.7

Note 1 : Tape and reel packaging. (3,000pcs/reel, 500pcs/reel)
Order by number of reels.
Note 2 : Contact positions without HRS No. are currently under planning.
Please contact hirose for detailed information about product variation.

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■Connector Dimensions

[FH52 (Standard Type) 1mm Pitch product]



Notes 1 The coplanarity of each terminal lead is within 0.1.
2 The contact terminal lead position indicates the dimension from the b surface, the bottom surface of the insulator body.
3 Packaged on tape and reel only. Check the packaging specification on Page 16 for details.
4 Sink mark reliefs may be added due to improvements
5 Sight variations in color of the plastic compounds do not affect form, fit or function. After reflow, the terminal plating may change color; however this does not represent a quality issue.
6 The dimensions of 30-contact actuators are shown in the figures.

Unit : mm

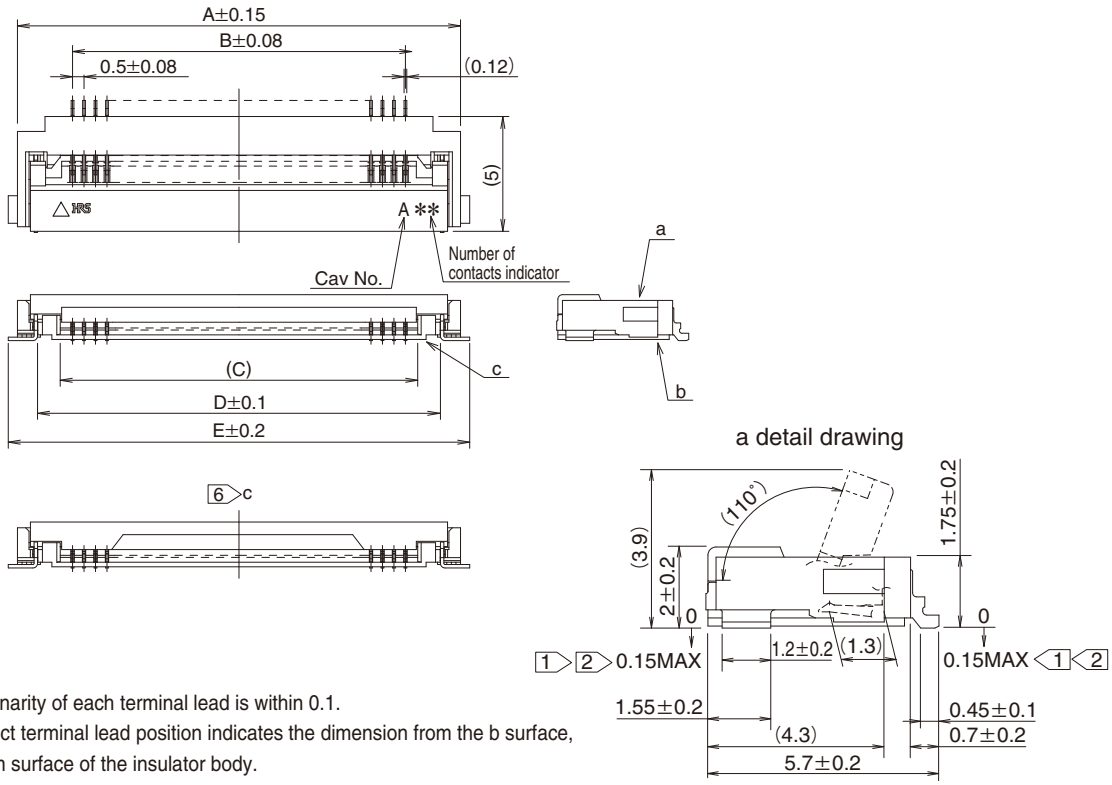
Part No.	HRS No.	No. of contacts	A	B	C	D	Q	R
FH52-10(4)SA-1SH(**)	580-3330-0 **	4	9.3	3	5.57	7.7	2.9	3.4
FH52-12S-1SH(**)	580-3323-5 **	12	16.8	11	13.07	15.2	2.9	2.9
FH52-32(16)SB-1SH(**)	580-3338-2 **	16	20.3	15	16.57	18.7	2.4	2.9
FH52-60(30)SB-1SH(**)	580-3315-7 **	30	34.3	29	30.57	32.7	2.4	2.9

Note 1 : Tape and reel packaging. (3,000pcs/reel, 500pcs/reel)
Order by number of reels.

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■Connector Dimensions

[FH52E (Long Metal Fittings Type) 0.5mm Pitch product]



Notes 1 The coplanarity of each terminal lead is within 0.1.
2 The contact terminal lead position indicates the dimension from the b surface, the bottom surface of the insulator body.
3 Packaged on tape and reel only. Check the packaging specification on Page 16 for details.
4 Sink mark reliefs may be added due to improvements
5 Sight variations in color of the plastic compounds do not affect form, fit or function. After reflow, the terminal plating may change color ; however this does not represent a quality issue.
6 The dimensions of 60-contact actuators are shown in the figures.

Unit : mm

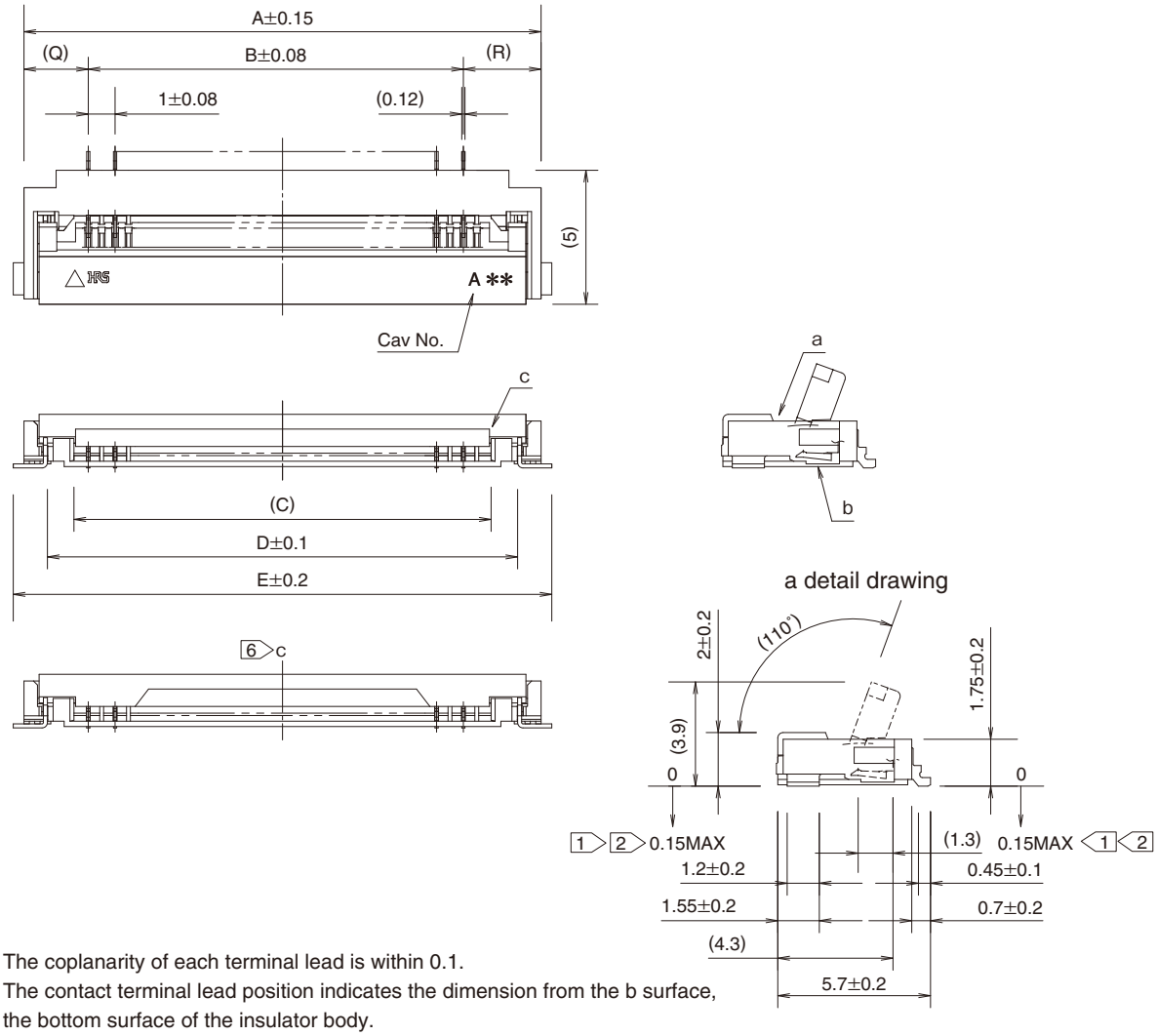
Part No.	HRS No.	No. of contacts	A	B	C	D	E
FH52E-4S-0.5SH(**)	Under planning (Note 2)	4	6.3	1.5	2.57	4.55	7.1
FH52E-5S-0.5SH(**)		5	6.8	2.0	3.07	5.05	7.6
FH52E-6S-0.5SH(**)		6	7.3	2.5	3.57	5.55	8.1
FH52E-8S-0.5SH(**)	580-3349-0 **	8	8.3	3.5	4.57	6.55	9.1
FH52E-10S-0.5SH(**)	580-3346-0 **	10	9.3	4.5	5.57	7.55	10.1
FH52E-11S-0.5SH(**)	Under planning (Note 2)	11	9.8	5.0	6.07	8.05	10.6
FH52E-12S-0.5SH(**)		12	10.3	5.5	6.57	8.55	11.1
FH52E-15S-0.5SH(**)	580-3337-0 **	15	11.8	7.0	8.07	10.05	12.6
FH52E-16S-0.5SH(**)	Under planning (Note 2)	16	12.3	7.5	8.57	10.55	13.1
FH52E-18S-0.5SH(**)	580-3331-3 **	18	13.3	8.5	9.57	11.55	14.1
FH52E-20S-0.5SH(**)	580-3357-0 **	20	14.3	9.5	10.57	12.55	15.1
FH52E-22S-0.5SH(**)	580-3343-2 **	22	15.3	10.5	11.57	13.55	16.1
FH52E-24S-0.5SH(**)	580-3340-4 **	24	16.3	11.5	12.57	14.55	17.1
FH52E-25S-0.5SH(**)	Under planning (Note 2)	25	16.8	12.0	13.07	15.05	17.6
FH52E-26S-0.5SH(**)		26	17.3	12.5	13.57	15.55	18.1
FH52E-28S-0.5SH(**)		28	18.3	13.5	14.57	16.55	19.1
FH52E-30S-0.5SH(**)	580-3347-3 **	30	19.3	14.5	15.57	17.55	20.1
FH52E-32S-0.5SH(**)	Under planning (Note 2)	32	20.3	15.5	16.57	18.55	21.1
FH52E-40S-0.5SH(**)	580-3334-1 **	40	24.3	19.5	20.57	22.55	25.1
FH52E-42S-0.5SH(**)	Under planning (Note 2)	42	25.3	20.5	21.57	23.55	26.1
FH52E-45S-0.5SH(**)		45	26.8	22.0	23.07	25.05	27.6
FH52E-50S-0.5SH(**)	580-3335-4 **	50	29.3	24.5	25.57	27.55	30.1
FH52E-60S-0.5SH(**)	580-3339-5 **	60	34.3	29.5	30.57	32.55	35.1
FH52E-64S-0.5SH(**)	580-3333-9 **	64	36.3	31.5	32.57	34.55	37.1
FH52E-68S-0.5SH(**)	580-3332-6 **	68	38.3	33.5	34.57	36.55	39.1

Note 1 : Tape and reel packaging. (3,000pcs/reel, 500pcs/reel)
Order by number of reels.
Note 2 : Contact positions without HRS No. are currently under planning.Please contact hirose for detailed information about product variation.

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■Connector Dimensions

[FH52E (Long Metal Fittings Type) 1mm Pitch product]



Notes 1 The coplanarity of each terminal lead is within 0.1.
2 The contact terminal lead position indicates the dimension from the b surface, the bottom surface of the insulator body.
3 Packaged on tape and reel only. Check the packaging specification on Page 16 for details.
4 Sink mark reliefs may be added due to improvements
5 Sight variations in color of the plastic compounds do not affect form, fit or function. After reflow, the terminal plating may change color; however this does not represent a quality issue.
6 The dimensions of 30-contact actuators are shown in the figures.

Unit : mm

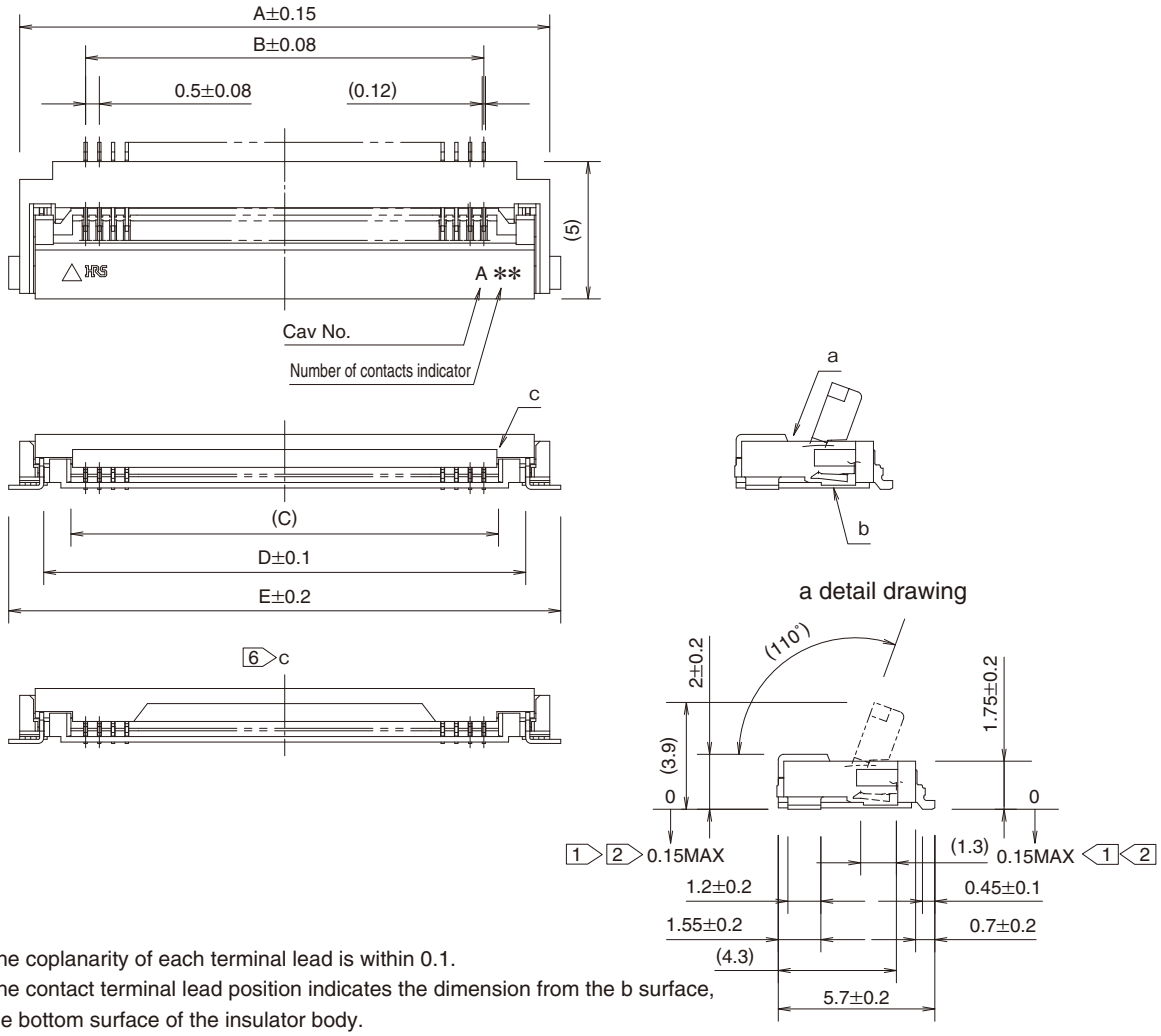
Part No.	HRS No.	No. of contacts	A	B	C	D	E	Q	R
FH52E-8(4)SB-1SH(**)	580-3351-0 **	4	8.3	3	4.57	6.55	9.1	2.4	2.9
FH52E-20(10)SA-1SH(**)	580-3352-0 **	10	14.3	9	10.57	12.55	15.1	2.9	2.4
FH52E-20(10)SB-1SH(**)	580-3353-0 **	10	14.3	9	10.57	12.55	15.1	2.4	2.9
FH52E-50(25)SA-1SH(**)	580-3354-0 **	25	29.3	24	25.57	27.55	30.1	2.9	2.4
FH52E-50(25)SB-1SH(**)	580-3355-0 **	25	29.3	24	25.57	27.55	30.1	2.4	2.9
FH52E-60(30)SB-1SH(**)	580-3358-0 **	30	34.3	29	30.57	32.55	35.1	2.4	2.9

Note 1 : Tape and reel packaging. (3,000pcs/reel, 500pcs/reel)
Order by number of reels.

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■Connector Dimensions

[FH52K (Long Metal Fittings Type, 125°C Heat Resistant Type) 0.5mm Pitch product]



Notes 1 The coplanarity of each terminal lead is within 0.1.
2 The contact terminal lead position indicates the dimension from the b surface, the bottom surface of the insulator body.
3 Packaged on tape and reel only. Check the packaging specification on Page 16 for details.
4 Sink mark reliefs may be added due to improvements
5 Sight variations in color of the plastic compounds do not affect form, fit or function. After reflow, the terminal plating may change color; however this does not represent a quality issue.
6 The dimensions of 60-contact actuators are shown in the figures.

Unit : mm

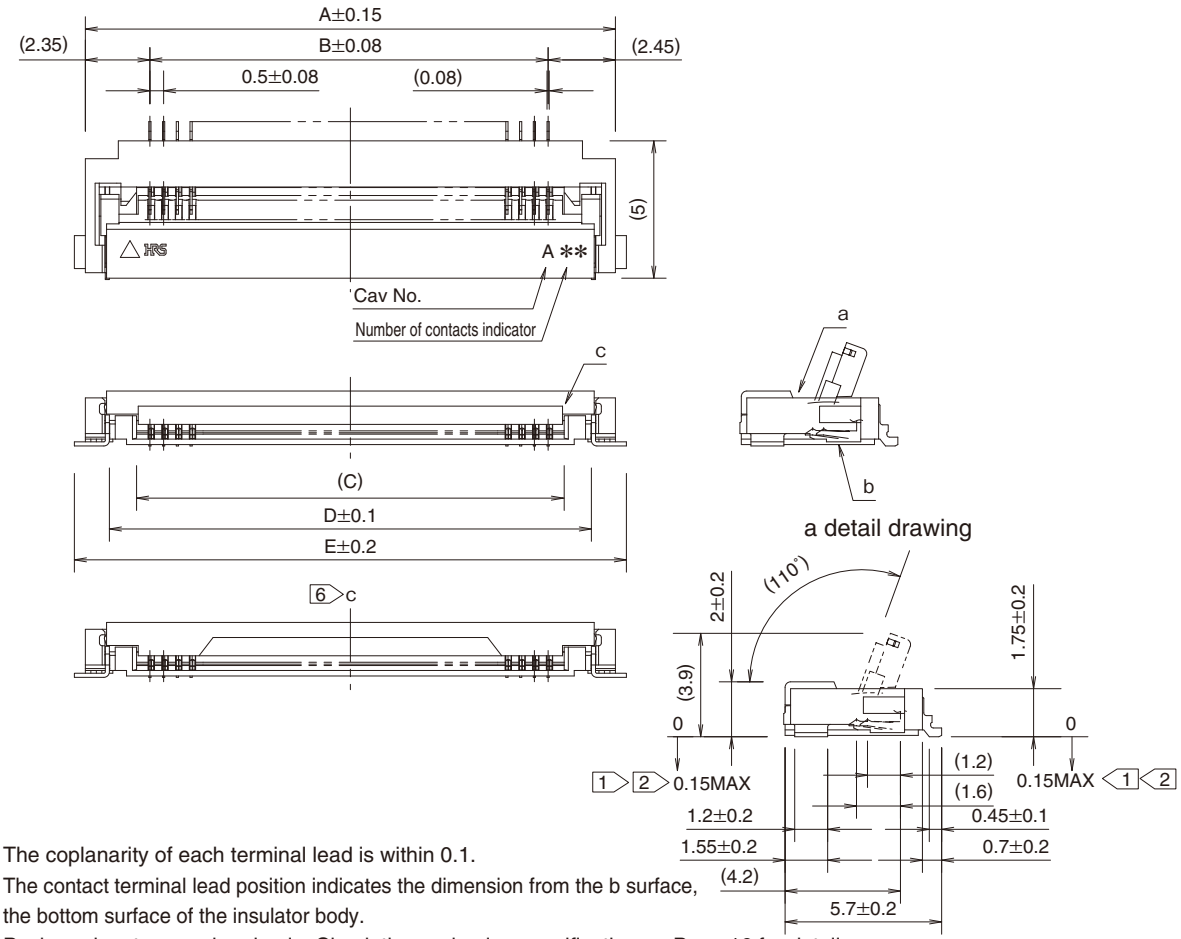
Part No.	HRS No.	No. of contacts	A	B	C	D	E
FH52K-6S-0.5SH(**)	580-4613-0 **	6	7.3	2.5	3.57	5.55	8.1
FH52K-8S-0.5SH(**)	580-4611-0 **	8	8.3	3.5	4.57	6.55	9.1
FH52K-10S-0.5SH(**)	580-4606-0 **	10	9.3	4.5	5.57	7.55	10.1
FH52K-12S-0.5SH(**)	Under planning (Note 2)	12	10.3	5.5	6.57	8.55	11.1
FH52K-15S-0.5SH(**)		15	11.8	7.0	8.07	10.05	12.6
FH52K-18S-0.5SH(**)		18	13.3	8.5	9.57	11.55	14.1
FH52K-20S-0.5SH(**)	580-4604-0 **	20	14.3	9.5	10.57	12.55	15.1
FH52K-22S-0.5SH(**)	Under planning (Note 2)	22	15.3	10.5	11.57	13.55	16.1
FH52K-24S-0.5SH(**)		24	16.3	11.5	12.57	14.55	17.1
FH52K-25S-0.5SH(**)		25	16.8	12.0	13.07	15.05	17.6
FH52K-26S-0.5SH(**)		26	17.3	12.5	13.57	15.55	18.1
FH52K-30S-0.5SH(**)		30	19.3	14.5	15.57	17.55	20.1
FH52K-32S-0.5SH(**)	580-4600-9 **	32	20.3	15.5	16.57	18.55	21.1
FH52K-34S-0.5SH(**)	580-4601-0 **	34	21.3	16.5	17.57	19.55	22.1
FH52K-40S-0.5SH(**)	Under planning (Note 2)	40	24.3	19.5	20.57	22.55	25.1
FH52K-50S-0.5SH(**)		50	29.3	24.5	25.57	27.55	30.1
FH52K-60S-0.5SH(**)		60	34.3	29.5	30.57	32.55	35.1
FH52K-64S-0.5SH(**)		64	36.3	31.5	32.57	34.55	37.1
FH52K-68S-0.5SH(**)	580-4614-0 **	68	38.3	33.5	34.57	36.55	39.1

Note 1 : Tape and reel packaging. (3,000pcs/reel, 500pcs/reel)
Order by number of reels.
Note 2 : Contact positions without HRS No. are currently under planning. Please contact hirose for detailed information about product variation.

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■Connector Dimensions

[FH52T (Long Metal Fittings Type, 2-Point Contact Type) 0.5mm Pitch product]



Notes 1 The coplanarity of each terminal lead is within 0.1.
2 The contact terminal lead position indicates the dimension from the b surface, the bottom surface of the insulator body.
3 Packaged on tape and reel only. Check the packaging specification on Page 16 for details.
4 Sink mark reliefs may be added due to improvements
5 Sight variations in color of the plastic compounds do not affect form, fit or function.
After reflow, the terminal plating may change color; however this does not represent a quality issue.
6 The dimensions of 60-contact actuators are shown in the figures.

Unit : mm

Part No.	HRS No.	No. of contacts	A	B	C	D	E
FH52T-4S-0.5SH(**)	Under planning (Note 2)	4	6.3	1.5	2.57	4.55	7.1
FH52T-5S-0.5SH(**)		5	6.8	2.0	3.07	5.05	7.6
FH52T-6S-0.5SH(**)		6	7.3	2.5	3.57	5.55	8.1
FH52T-8S-0.5SH(**)		8	8.3	3.5	4.57	6.55	9.1
FH52T-10S-0.5SH(**)	580-4503-0 **	10	9.3	4.5	5.57	7.55	10.1
FH52T-11S-0.5SH(**)	Under planning (Note 2)	11	9.8	5.0	6.07	8.05	10.6
FH52T-12S-0.5SH(**)		12	10.3	5.5	6.57	8.55	11.1
FH52T-15S-0.5SH(**)		15	11.8	7.0	8.07	10.05	12.6
FH52T-16S-0.5SH(**)		16	12.3	7.5	8.57	10.55	13.1
FH52T-18S-0.5SH(**)		18	13.3	8.5	9.57	11.55	14.1
FH52T-20S-0.5SH(**)		20	14.3	9.5	10.57	12.55	15.1
FH52T-22S-0.5SH(**)		22	15.3	10.5	11.57	13.55	16.1
FH52T-24S-0.5SH(**)	580-4500-0 **	24	16.3	11.5	12.57	14.55	17.1
FH52T-25S-0.5SH(**)	Under planning (Note 2)	25	16.8	12.0	13.07	15.05	17.6
FH52T-26S-0.5SH(**)		26	17.3	12.5	13.57	15.55	18.1
FH52T-28S-0.5SH(**)		28	18.3	13.5	14.57	16.55	19.1
FH52T-30S-0.5SH(**)		30	19.3	14.5	15.57	17.55	20.1
FH52T-32S-0.5SH(**)	580-4502-0 **	32	20.3	15.5	16.57	18.55	21.1
FH52T-40S-0.5SH(**)	Under planning (Note 2)	40	24.3	19.5	20.57	22.55	25.1
FH52T-42S-0.5SH(**)		42	25.3	20.5	21.57	23.55	26.1
FH52T-45S-0.5SH(**)		45	26.8	22.0	23.07	25.05	27.6
FH52T-50S-0.5SH(**)	580-4501-7 **	50	29.3	24.5	25.57	27.55	30.1
FH52T-60S-0.5SH(**)	Under planning (Note 2)	60	34.3	29.5	30.57	32.55	35.1
FH52T-64S-0.5SH(**)		64	36.3	31.5	32.57	34.55	37.1
FH52T-68S-0.5SH(**)		68	38.3	33.5	34.57	36.55	39.1

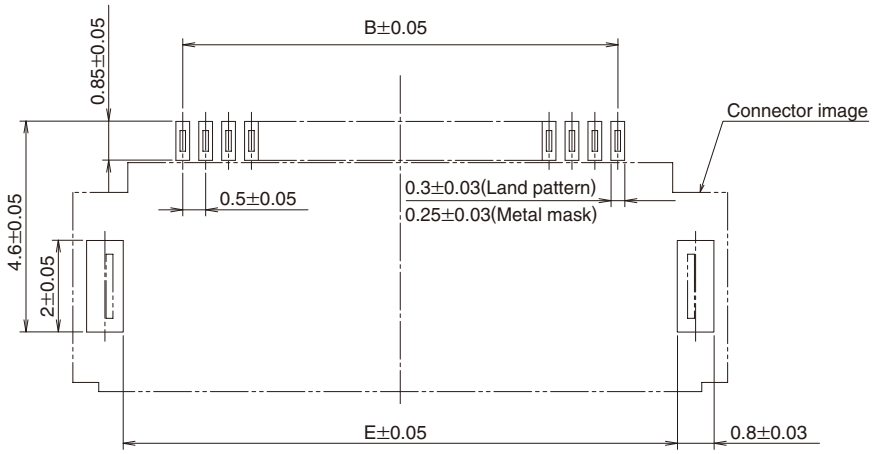
Note 1 : Tape and reel packaging. (3,000pcs/reel, 500pcs/reel)
Order by number of reels.
Note 2 : Contact positions without HRS No. are currently under planning. Please contact hirose for detailed information about product variation.

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◆Recommended PCB Mounting Pattern and Metal Mask Dimensions

[FH52 (Standard Type) 0.5mm Pitch product]

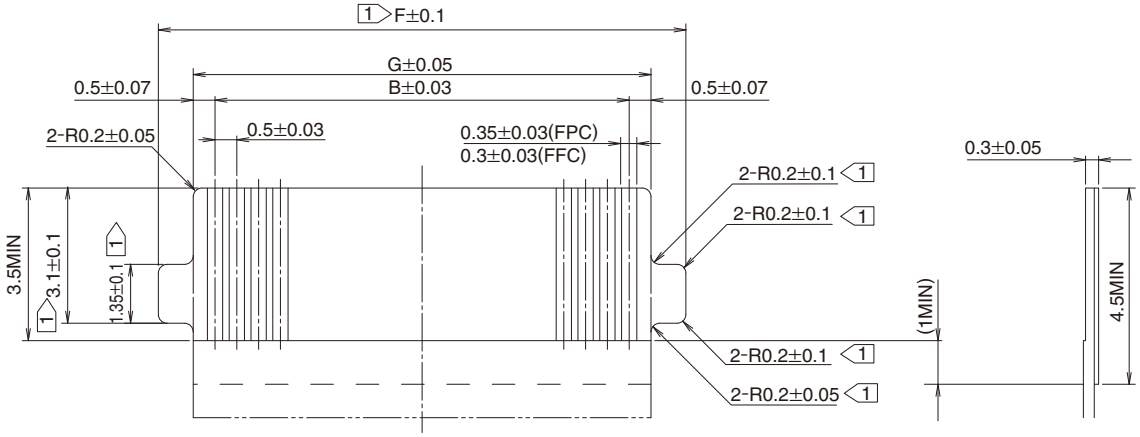
Recommended metal mask thickness : 0.12mm



∗ The recommended PCB mounting pattern for the FH12 Series (horizontal mounting type) can be used as well.

◆Recommended FPC/FFC Dimensions

[FH52 (Standard Type) 0.5mm Pitch product]



Notes 1 FFC/FPC without tabs can also be used.
In that case, the specified portions are not necessary.

Unit : mm

Part No.	HRS No.	No. of contacts	B	E	F	G
FH52-4S-0.5SH(**)	Under planning (Note 1)	4	1.5	4.1	4.1	2.5
FH52-5S-0.5SH(**)		5	2.0	4.6	4.6	3.0
FH52-6S-0.5SH(**)	580-3304-0 **	6	2.5	5.1	5.1	3.5
FH52-8S-0.5SH(**)	580-3305-3 **	8	3.5	6.1	6.1	4.5
FH52-10S-0.5SH(**)	580-3306-6 **	10	4.5	7.1	7.1	5.5
FH52-11S-0.5SH(**)	580-3320-7 **	11	5.0	7.6	7.6	6.0
FH52-12S-0.5SH(**)	580-3307-9 **	12	5.5	8.1	8.1	6.5
FH52-15S-0.5SH(**)	580-3302-5 **	15	7.0	9.6	9.6	8.0
FH52-16S-0.5SH(**)	Under planning (Note 1)	16	7.5	10.1	10.1	8.5
FH52-18S-0.5SH(**)	580-3321-0 **	18	8.5	11.1	11.1	9.5
FH52-20S-0.5SH(**)	580-3309-4 **	20	9.5	12.1	12.1	10.5
FH52-22S-0.5SH(**)	580-3317-2 **	22	10.5	13.1	13.1	11.5
FH52-24S-0.5SH(**)	580-3318-5 **	24	11.5	14.1	14.1	12.5
FH52-25S-0.5SH(**)	580-3316-0 **	25	12.0	14.6	14.6	13.0
FH52-26S-0.5SH(**)	580-3319-8 **	26	12.5	15.1	15.1	13.5
FH52-28S-0.5SH(**)	580-3324-8 **	28	13.5	16.1	16.1	14.5
FH52-30S-0.5SH(**)	580-3310-3 **	30	14.5	17.1	17.1	15.5
FH52-32S-0.5SH(**)	580-3325-0 **	32	15.5	18.1	18.1	16.5
FH52-40S-0.5SH(**)	580-3300-0 **	40	19.5	22.1	22.1	20.5
FH52-42S-0.5SH(**)	580-3329-1 **	42	20.5	23.1	23.1	21.5
FH52-45S-0.5SH(**)	580-3311-6 **	45	22.0	24.6	24.6	23.0
FH52-50S-0.5SH(**)	580-3303-8 **	50	24.5	27.1	27.1	25.5
FH52-60S-0.5SH(**)	580-3301-2 **	60	29.5	32.1	32.1	30.5

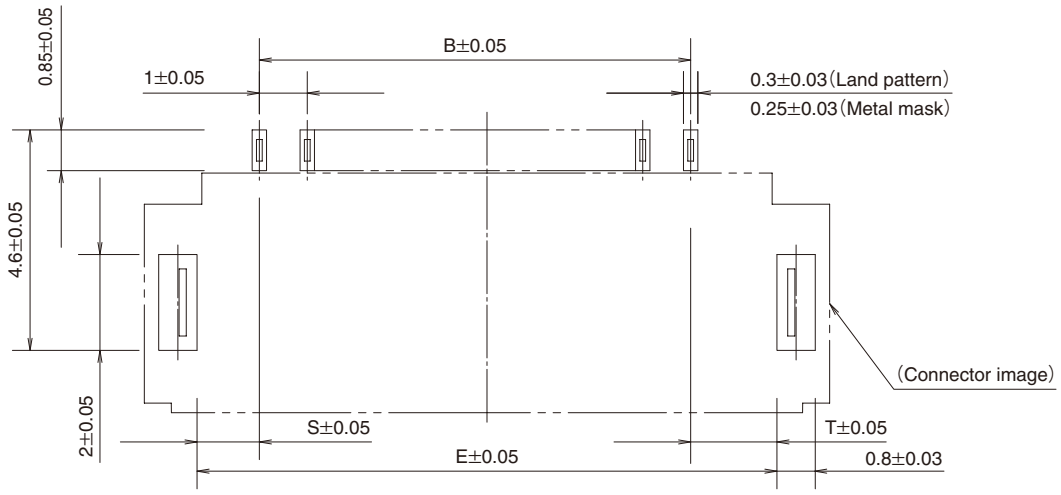
Note 1 : Contact positions without HRS No. are currently under planning. Please contact hirose for detailed information about product variation.

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◆Recommended PCB Mounting Pattern and Metal Mask Dimensions

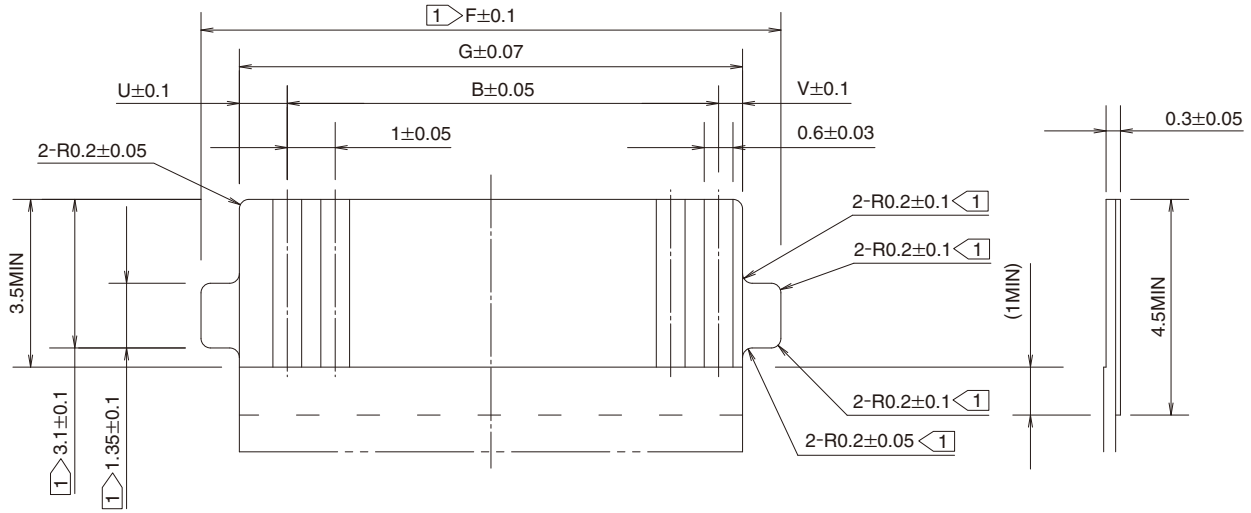
[FH52 (Standard Type) 1mm Pitch product]

Recommended metal mask thickness : 0.12mm



◆Recommended FPC/FFC Dimensions

[FH52 (Standard Type) 1mm Pitch product]



Notes 1 FFC/FPC without tabs can also be used.
In that case, the specified portions are not necessary.

Unit : mm

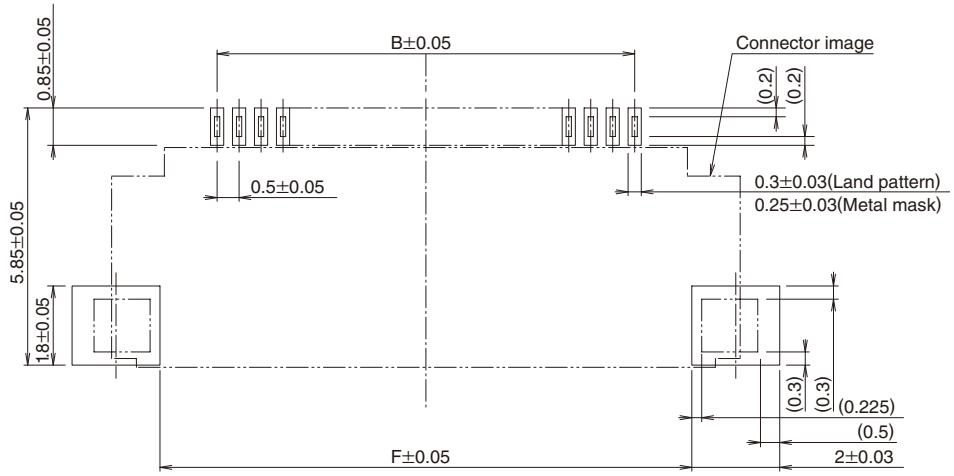
Part No.	HRS No.	No. of contacts	B	E	F	G	S	T	U	V
FH52-10(4)SA-1SH(**)	580-3330-0 **	4	3	7.1	7.1	5.5	1.8	2.3	1.5	1
FH52-12S-1SH(**)	580-3323-5 **	12	11	14.6	14.6	13.0	1.8	1.8	1	1
FH52-32(16)SB-1SH(**)	580-3338-2 **	16	15	18.1	18.1	16.5	1.3	1.8	1	0.5
FH52-60(30)SB-1SH(**)	580-3315-7 **	30	29	32.1	32.1	30.5	1.3	1.8	1	0.5

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◆Recommended PCB Mounting Pattern and Metal Mask Dimensions

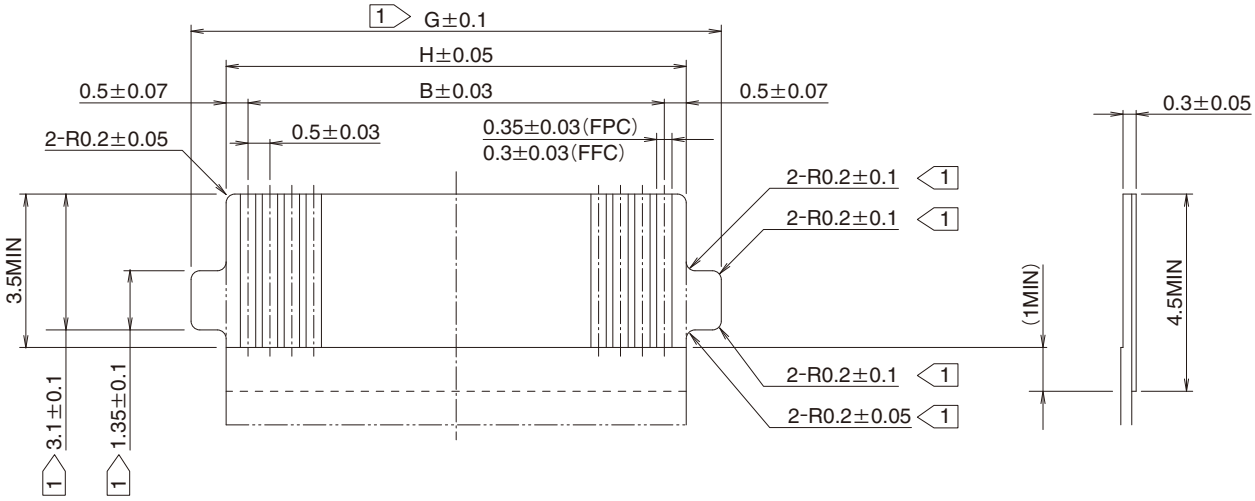
[FH52E (Long Metal Fittings Type) 0.5mm Pitch product]

Recommended metal mask thickness : 0.12mm



◆Recommended FPC/FFC Dimensions

[FH52E (Long Metal Fittings Type) 0.5mm Pitch product]



Notes 1 FFC/FPC without tabs can also be used.
In that case, the specified portions are not necessary.

Unit : mm

Part No.	HRS No.	No. of contacts	B	F	G	H
FH52E-4S-0.5SH(**)	Under planning (Note 1)	4	1.5	4.1	4.1	2.5
FH52E-5S-0.5SH(**)		5	2.0	4.6	4.6	3.0
FH52E-6S-0.5SH(**)		6	2.5	5.1	5.1	3.5
FH52E-8S-0.5SH(**)	580-3349-0 **	8	3.5	6.1	6.1	4.5
FH52E-10S-0.5SH(**)	580-3346-0 **	10	4.5	7.1	7.1	5.5
FH52E-11S-0.5SH(**)	Under planning (Note 1)	11	5.0	7.6	7.6	6.0
FH52E-12S-0.5SH(**)		12	5.5	8.1	8.1	6.5
FH52E-15S-0.5SH(**)	580-3337-0 **	15	7.0	9.6	9.6	8.0
FH52E-16S-0.5SH(**)	Under planning (Note 1)	16	7.5	10.1	10.1	8.5
FH52E-18S-0.5SH(**)	580-3331-3 **	18	8.5	11.1	11.1	9.5
FH52E-20S-0.5SH(**)	580-3357-0 **	20	9.5	12.1	12.1	10.5
FH52E-22S-0.5SH(**)	580-3343-2 **	22	10.5	13.1	13.1	11.5
FH52E-24S-0.5SH(**)	580-3340-4 **	24	11.5	14.1	14.1	12.5
FH52E-25S-0.5SH(**)	Under planning (Note 1)	25	12.0	14.6	14.6	13.0
FH52E-26S-0.5SH(**)		26	12.5	15.1	15.1	13.5
FH52E-28S-0.5SH(**)		28	13.5	16.1	16.1	14.5
FH52E-30S-0.5SH(**)	580-3347-3 **	30	14.5	17.1	17.1	15.5
FH52E-32S-0.5SH(**)	Under planning (Note 1)	32	15.5	18.1	18.1	16.5
FH52E-40S-0.5SH(**)	580-3334-1 **	40	19.5	22.1	22.1	20.5
FH52E-42S-0.5SH(**)	Under planning (Note 1)	42	20.5	23.1	23.1	21.5
FH52E-45S-0.5SH(**)		45	22.0	24.6	24.6	23.0
FH52E-50S-0.5SH(**)	580-3335-4 **	50	24.5	27.1	27.1	25.5
FH52E-60S-0.5SH(**)	580-3339-5 **	60	29.5	32.1	32.1	30.5
FH52E-64S-0.5SH(**)	580-3333-9 **	64	31.5	34.1	34.1	32.5
FH52E-68S-0.5SH(**)	580-3332-6 **	68	33.5	36.1	36.1	34.5

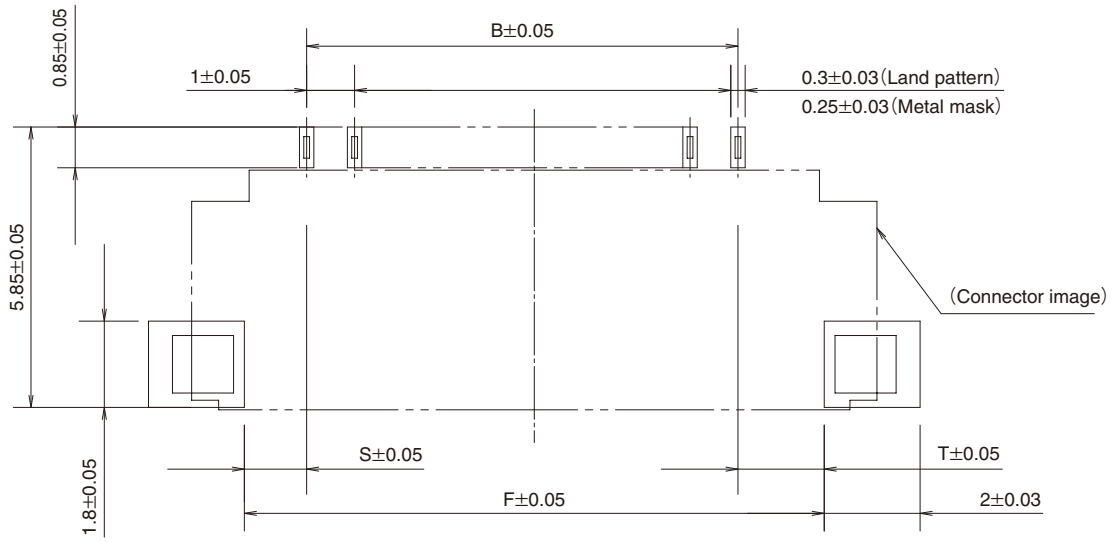
Note 1 : Contact positions without HRS No. are currently under planning. Please contact hirose for detailed information about product variation.

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◆Recommended PCB Mounting Pattern and Metal Mask Dimensions

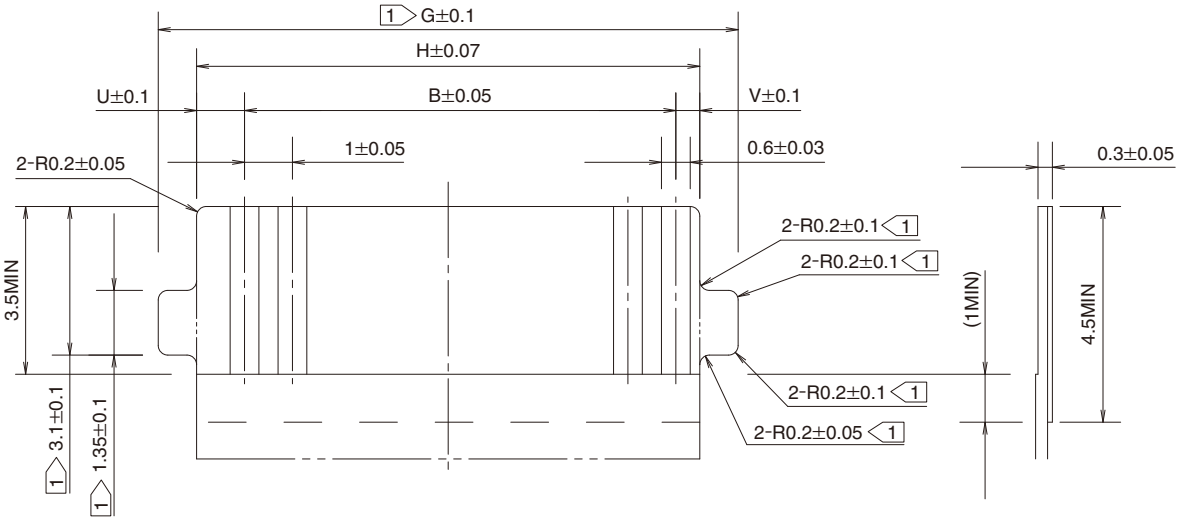
[FH52E (Long Metal Fittings Type) 1mm Pitch product]

Recommended metal mask thickness : 0.12mm



◆Recommended FPC/FFC Dimensions

[FH52E (Long Metal Fittings Type) 1mm Pitch product]



Notes 1 FFC/FPC without tabs can also be used.
In that case, the specified portions are not necessary.

Unit : mm

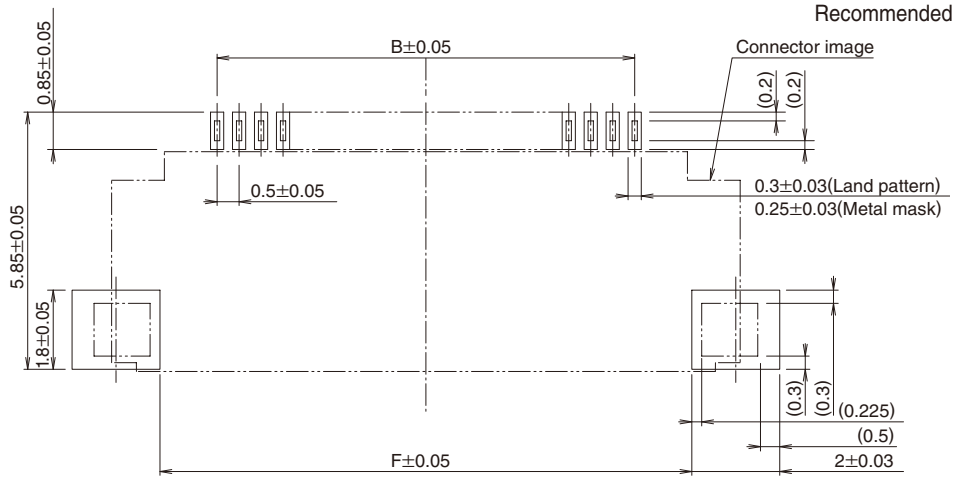
Part No.	HRS No.	No. of contacts	B	F	G	H	S	T	U	V
FH52E-8(4)SB-1SH(**)	580-3351-0 **	4	3	6.1	6.1	4.5	1.3	1.8	1	0.5
FH52E-20(10)SA-1SH(**)	580-3352-0 **	10	9	12.1	12.1	10.5	1.8	1.3	0.5	1
FH52E-20(10)SB-1SH(**)	580-3353-0 **	10	9	12.1	12.1	10.5	1.3	1.8	1	0.5
FH52E-50(25)SA-1SH(**)	580-3354-0 **	25	24	27.1	27.1	25.5	1.8	1.3	0.5	1
FH52E-50(25)SB-1SH(**)	580-3355-0 **	25	24	27.1	27.1	25.5	1.3	1.8	1	0.5
FH52E-60(30)SB-1SH(**)	580-3358-0 **	30	34.3	32.1	32.1	30.5	1.3	1.8	1	0.5

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◆Recommended PCB Mounting Pattern and Metal Mask Dimensions

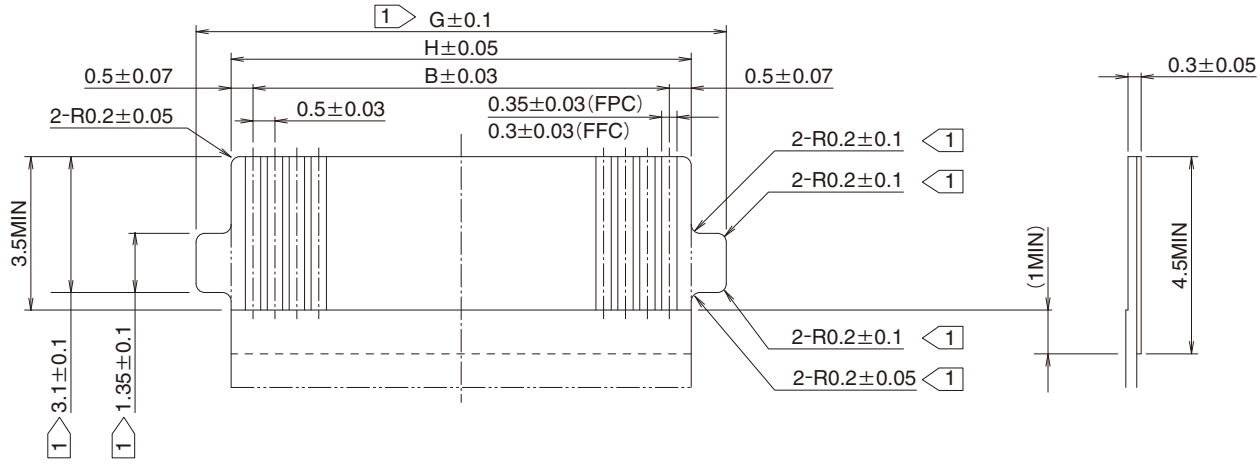
[FH52K (Long Metal Fittings Type, 125°C Heat Resistant Type) 0.5mm Pitch product]

Recommended metal mask thickness : 0.12mm



◆Recommended FPC/FFC Dimensions

[FH52K (Long Metal Fittings Type, 125°C Heat Resistant Type) 0.5mm Pitch product]



Notes 1 FFC/FPC without tabs can also be used.
In that case, the specified portions are not necessary.

Unit : mm

Part No.	HRS No.	No. of contacts	B	F	G	H
FH52K-6S-0.5SH(**)	580-4613-0 **	6	2.5	5.1	5.1	3.5
FH52K-8S-0.5SH(**)	580-4611-0 **	8	3.5	6.1	6.1	4.5
FH52K-10S-0.5SH(**)	580-4606-0 **	10	4.5	7.1	7.1	5.5
FH52K-12S-0.5SH(**)	Under planning (Note 1)	12	5.5	8.1	8.1	6.5
FH52K-15S-0.5SH(**)		15	7.0	9.6	9.6	8.0
FH52K-18S-0.5SH(**)		18	8.5	11.1	11.1	9.5
FH52K-20S-0.5SH(**)	580-4604-0 **	20	9.5	12.1	12.1	10.5
FH52K-22S-0.5SH(**)	Under planning (Note 1)	22	10.5	13.1	13.1	11.5
FH52K-24S-0.5SH(**)		24	11.5	14.1	14.1	12.5
FH52K-25S-0.5SH(**)		25	12.0	14.6	14.6	13.0
FH52K-26S-0.5SH(**)		26	12.5	15.1	15.1	13.5
FH52K-30S-0.5SH(**)		30	14.5	17.1	17.1	15.5
FH52K-32S-0.5SH(**)	580-4600-9 **	32	15.5	18.1	18.1	16.5
FH52K-34S-0.5SH(**)	580-4601-0 **	34	16.5	19.1	19.1	17.5
FH52K-40S-0.5SH(**)	Under planning (Note 1)	40	19.5	22.1	22.1	20.5
FH52K-50S-0.5SH(**)		50	24.5	27.1	27.1	25.5
FH52K-60S-0.5SH(**)		60	29.5	32.1	32.1	30.5
FH52K-64S-0.5SH(**)		64	31.5	34.1	34.1	32.5
FH52K-68S-0.5SH(**)	580-4614-0 **	68	33.5	36.1	36.1	34.5

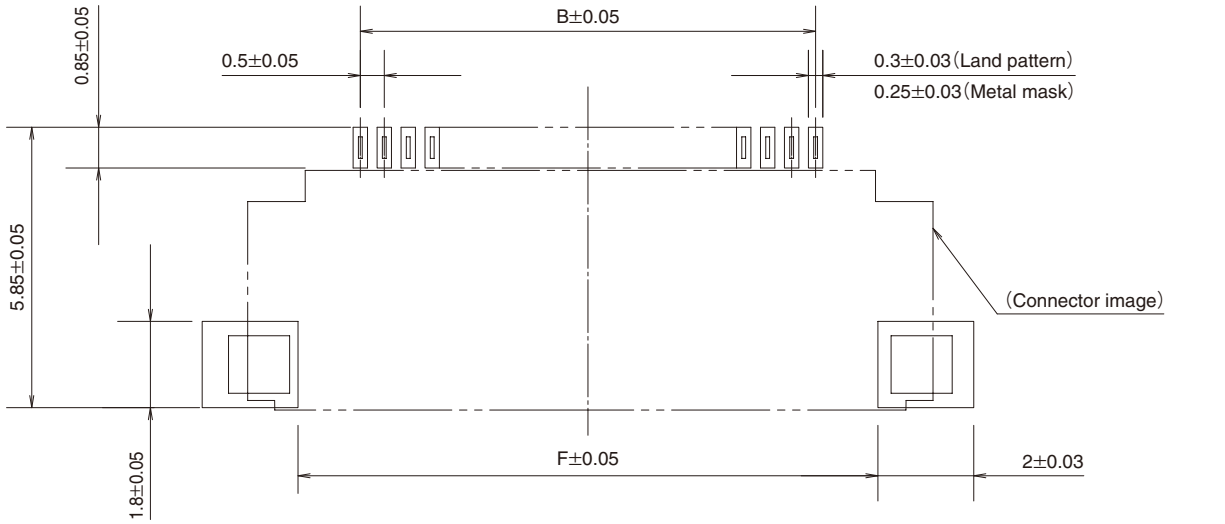
Note 1 : Contact positions without HRS No. are currently under planning.
Please contact hirose for detailed information about product variation.

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◆Recommended PCB Mounting Pattern and Metal Mask Dimensions

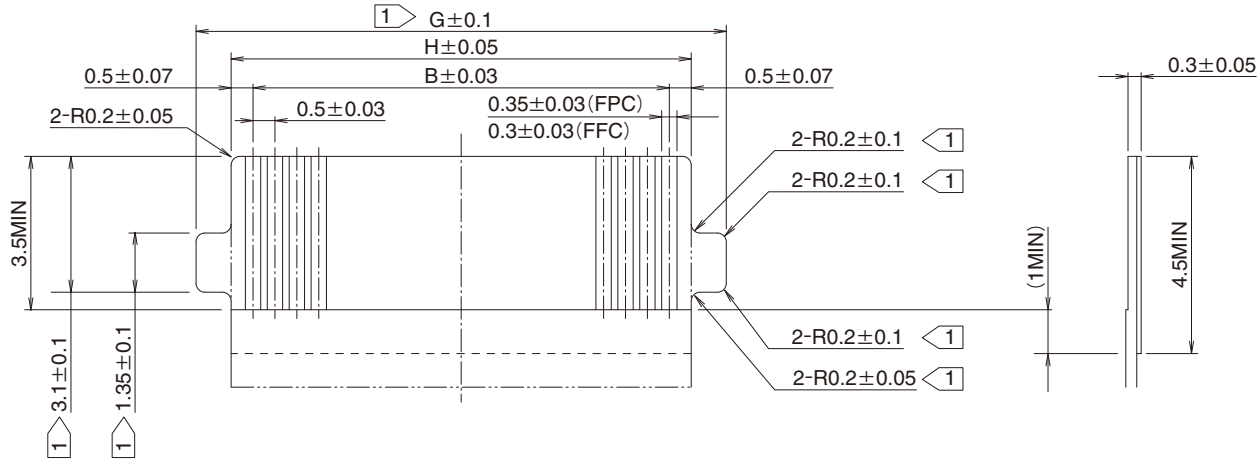
[FH52T (Long Metal Fittings Type, 2-Point Contact Type) 0.5mm Pitch product]

Recommended metal mask thickness : 0.12mm



◆Recommended FPC/FFC Dimensions

[FH52T (Long Metal Fittings Type, 2-Point Contact Type) 0.5mm Pitch product]



Notes 1 FFC/FPC without tabs can also be used.
In that case, the specified portions are not necessary.

Unit : mm

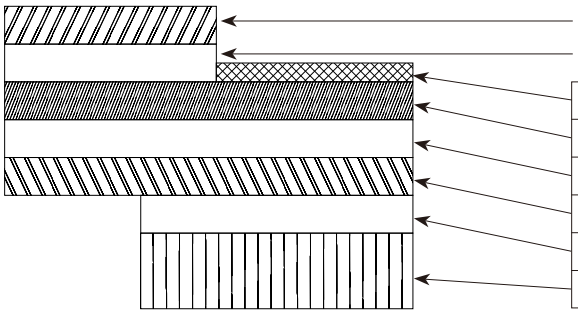
Part No.	HRS No.	No. of contacts	B	F	G	H
FH52T-4S-0.5SH(**)	Under planning (Note 1)	4	1.5	4.1	4.1	2.5
FH52T-5S-0.5SH(**)		5	2.0	4.6	4.6	3.0
FH52T-6S-0.5SH(**)		6	2.5	5.1	5.1	3.5
FH52T-8S-0.5SH(**)		8	3.5	6.1	6.1	4.5
FH52T-10S-0.5SH(**)	580-4503-0 **	10	4.5	7.1	7.1	5.5
FH52T-11S-0.5SH(**)	Under planning (Note 1)	11	5.0	7.6	7.6	6.0
FH52T-12S-0.5SH(**)		12	5.5	8.1	8.1	6.5
FH52T-15S-0.5SH(**)		15	7.0	9.6	9.6	8.0
FH52T-16S-0.5SH(**)		16	7.5	10.1	10.1	8.5
FH52T-18S-0.5SH(**)		18	8.5	11.1	11.1	9.5
FH52T-20S-0.5SH(**)		20	9.5	12.1	12.1	10.5
FH52T-22S-0.5SH(**)		22	10.5	13.1	13.1	11.5
FH52T-24S-0.5SH(**)	580-4500-0 **	24	11.5	14.1	14.1	12.5
FH52T-25S-0.5SH(**)	Under planning (Note 1)	25	12.0	14.6	14.6	13.0
FH52T-26S-0.5SH(**)		26	12.5	15.1	15.1	13.5
FH52T-28S-0.5SH(**)		28	13.5	16.1	16.1	14.5
FH52T-30S-0.5SH(**)		30	14.5	17.1	17.1	15.5
FH52T-32S-0.5SH(**)	580-4502-0 **	32	15.5	18.1	18.1	16.5
FH52T-40S-0.5SH(**)	Under planning (Note 1)	40	19.5	22.1	22.1	20.5
FH52T-42S-0.5SH(**)		42	20.5	23.1	23.1	21.5
FH52T-45S-0.5SH(**)		45	22.0	24.6	24.6	23.0
FH52T-50S-0.5SH(**)	580-4501-7 **	50	24.5	27.1	27.1	25.5
FH52T-60S-0.5SH(**)	Under planning (Note 1)	60	29.5	32.1	32.1	30.5
FH52T-64S-0.5SH(**)		64	31.5	34.1	34.1	32.5
FH52T-68S-0.5SH(**)		68	33.5	36.1	36.1	34.5

Note 1 : Contact positions without HRS No. are currently under planning. Please contact hirose for detailed information about product variation.

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◆FH52 Series FPC/FFC Construction (Recommended Specifications)

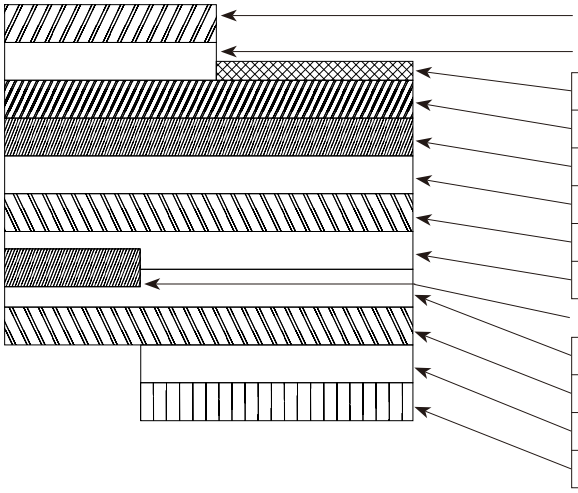
1. Using Single-Sided FPC



FPC : Flexible Printed Circuit

Material name	Material	Thickness (μm)
Covering film layer	Polyimide 1mil	(25)
Cover adhesive		(25)
Surface treatment	0.2 μm thick gold plated over 1 to 5 μm thick nickel underplating	3
Copper foil	Cu 1oz	35
Base adhesive	Thermosetting adhesive	25
Base film	Polyimide 1mil thick	25
Reinforcement material adhesive	Thermosetting adhesive	30
Stiffener	Polyimide 7mil thick	175
	Total	293

2. Using Double-Sided FPC

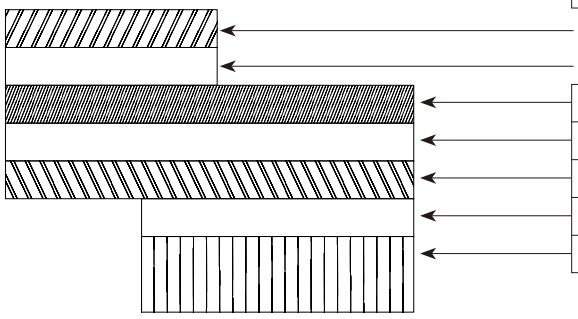


FPC : Flexible Printed Circuit

Material name	Material	Thickness (μm)
Covering film layer	Polyimide 1mil	(25)
Cover adhesive		(25)
Surface treatment	0.2 μm thick gold plated over 1 to 5 μm thick nickel underplating	3
Through-hole copper	Cu	15
Copper foil	Cu 1/2oz	18
Base adhesive	Thermosetting adhesive	18
Base film	Polyimide 1mil thick	25
Base adhesive	Thermosetting adhesive	18
Copper foil	Cu 1/2oz	(18)
Cover adhesive	Thermosetting adhesive	25
Covering layer film	Polyimide 1mil thick	25
Reinforcement material adhesive	Thermosetting adhesive	50
Stiffener	Polyimide 4mil thick	100
	Total	297

∗ To prevent release of the FPC due to its bending, use of the double sided FPC with copper foil on the back side is not recommended.

3. Using FFC



FFC : Flexible Flat Cable

Material name	Material	Thickness (μm)
Polyester film		(12)
Adhesive	Thermoplastic polyester	(30)
Gold plated annealed copper foil		35
Adhesive	Polyester	30
Polyester		12
Adhesive	Polyester	30
Stiffener	Polyester	188
	Total	295

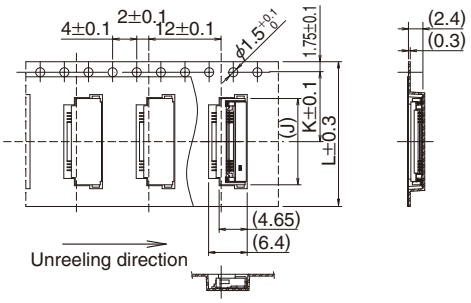
∗ Typical thickness tolerance is about ±20μm

1. This specification is a recommendation for the construction of the FH52 Series FPC and FFC (t = 0.3 ± 0.05mm).
2. For details about the construction, please contact the FPC/FFC manufacturers.

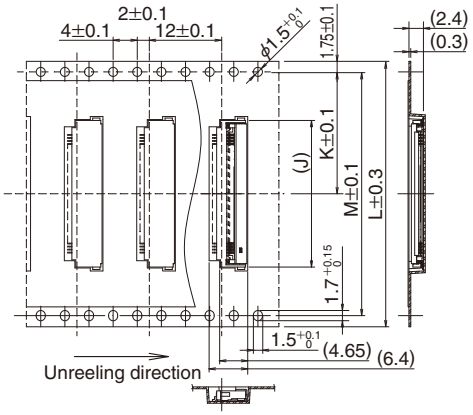
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◆Packaging Specification

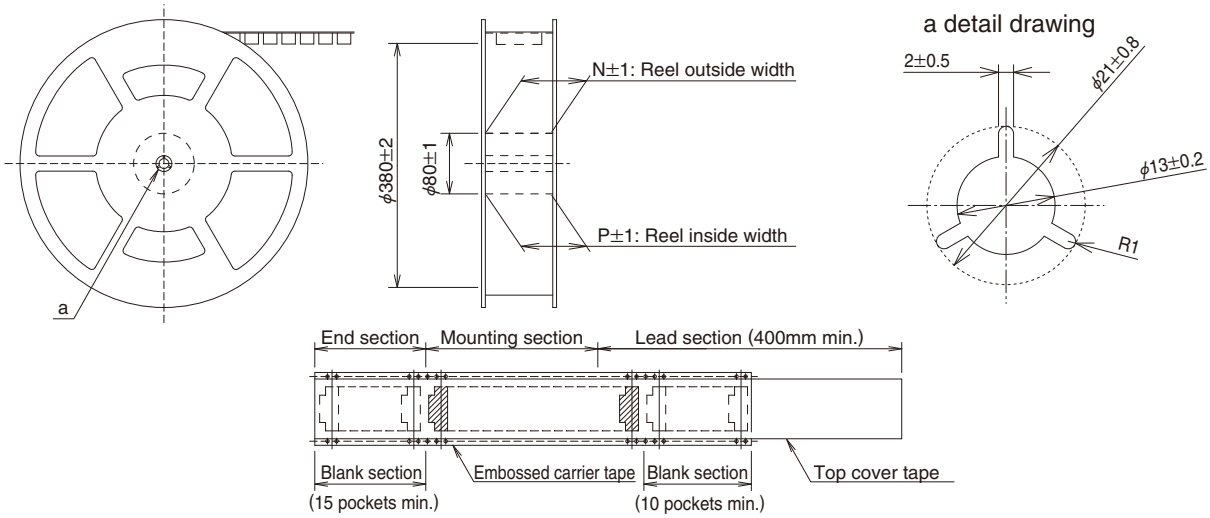
●Embossed carrier tape dimensions (tape width 24mm or less)



●Embossed carrier tape dimensions (tape width 32mm or more)



●Reel Dimensions



[FH52 (Standard Type) 0.5mm Pitch product]

Unit : mm

Part No.	HRS No.	No. of contacts	J	K	L	M	N	P
FH52-4S-0.5SH(**)	Under planning (Note 1)	4	6.6	7.5	16.0	———	21.4	17.4
FH52-5S-0.5SH(**)		5	7.1	11.5	24.0	———	29.4	25.4
FH52-6S-0.5SH(**)	580-3304-0 **	6	7.6			———		
FH52-8S-0.5SH(**)	580-3305-3 **	8	8.6			———		
FH52-10S-0.5SH(**)	580-3306-6 **	10	9.6			———		
FH52-11S-0.5SH(**)	580-3320-7 **	11	10.1			———		
FH52-12S-0.5SH(**)	580-3307-9 **	12	10.6			———		
FH52-15S-0.5SH(**)	580-3302-5 **	15	12.1			———		
FH52-16S-0.5SH(**)	Under planning (Note 1)	16	12.6			———		
FH52-18S-0.5SH(**)	580-3321-0 **	18	13.6			———		
FH52-20S-0.5SH(**)	580-3309-4 **	20	14.6			———		
FH52-22S-0.5SH(**)	580-3317-2 **	22	15.6	14.2	32.0	28.4	37.4	33.4
FH52-24S-0.5SH(**)	580-3318-5 **	24	16.6					
FH52-25S-0.5SH(**)	580-3316-0 **	25	17.1					
FH52-26S-0.5SH(**)	580-3319-8 **	26	17.6					
FH52-28S-0.5SH(**)	580-3324-8 **	28	18.6					
FH52-30S-0.5SH(**)	580-3310-3 **	30	19.6					
FH52-32S-0.5SH(**)	580-3325-0 **	32	20.6	20.2	44.0	40.4	49.4	45.4
FH52-40S-0.5SH(**)	580-3300-0 **	40	24.6					
FH52-42S-0.5SH(**)	580-3329-1 **	42	25.6					
FH52-45S-0.5SH(**)	580-3311-6 **	45	27.1					
FH52-50S-0.5SH(**)	580-3303-8 **	50	29.6					
FH52-60S-0.5SH(**)	580-3301-2 **	60	34.6	26.2	56.0	52.4	61.4	57.4

[FH52 (Standard Type) 1mm Pitch product]

Unit : mm

Part No.	HRS No.	No. of contacts	J	K	L	M	N	P
FH52-10(4)SA-1SH(**)	580-3330-0 **	4	9.6	11.5	24.0	———	29.4	25.4
FH52-12S-1SH(**)	580-3323-5 **	12	17.1	14.2	32.0	28.4	37.4	33.4
FH52-32(16)SB-1SH(**)	580-3338-2 **	16	20.6	20.2	44.0	40.4	49.4	45.4
FH52-60(30)SB-1SH(**)	580-3315-7 **	30	34.6	26.2	56.0	52.4	61.4	57.4

Note 1 : Contact positions without HRS No. are currently under planning. Please contact hirose for detailed information about product variation.

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[FH52E (Long Metal Fittings Type) 0.5mm Pitch product]

Unit : mm

Part No.	HRS No.	No. of contacts	J	K	L	M	N	P
FH52E-4S-0.5SH(**)	Under planning (Note 1)	4	6.6	7.5	16.0	———	21.4	17.4
FH52E-5S-0.5SH(**)		5	7.1	11.5	24.0	———	29.4	25.4
FH52E-6S-0.5SH(**)		6	7.6			———		
FH52E-8S-0.5SH(**)	580-3349-0 **	8	8.6			———		
FH52E-10S-0.5SH(**)	580-3346-0 **	10	9.6			———		
FH52E-11S-0.5SH(**)	Under planning (Note 1)	11	10.1			———		
FH52E-12S-0.5SH(**)		12	10.6			———		
FH52E-15S-0.5SH(**)	580-3337-0 **	15	12.1			———		
FH52E-16S-0.5SH(**)	Under planning (Note 1)	16	12.6			———		
FH52E-18S-0.5SH(**)	580-3331-3 **	18	13.6			———		
FH52E-20S-0.5SH(**)	580-3357-0 **	20	14.6			———		
FH52E-22S-0.5SH(**)	580-3343-2 **	22	15.6	14.2	32.0	28.4	37.4	33.4
FH52E-24S-0.5SH(**)	580-3340-4 **	24	16.6					
FH52E-25S-0.5SH(**)	Under planning (Note 1)	25	17.1					
FH52E-26S-0.5SH(**)		26	17.6					
FH52E-28S-0.5SH(**)		28	18.6					
FH52E-30S-0.5SH(**)	580-3347-3 **	30	19.6	20.2	44.0	40.4	49.4	45.4
FH52E-32S-0.5SH(**)	Under planning (Note 1)	32	20.6					
FH52E-40S-0.5SH(**)	580-3334-1 **	40	24.6					
FH52E-42S-0.5SH(**)	Under planning (Note 1)	42	25.6					
FH52E-45S-0.5SH(**)		45	27.1					
FH52E-50S-0.5SH(**)	580-3335-4 **	50	29.6					
FH52E-60S-0.5SH(**)	580-3339-5 **	60	34.6	26.2	56.0	52.4	61.4	57.4
FH52E-64S-0.5SH(**)	580-3333-9 **	64	36.6					
FH52E-68S-0.5SH(**)	580-3332-6 **	68	38.6					

[FH52E (Long Metal Fittings Type) 1mm Pitch product]

Unit : mm

Part No.	HRS No.	No. of contacts	J	K	L	M	N	P
FH52E-8(4)SB-1SH(**)	580-3351-0 **	4	8.6	11.5	24.0	———	29.4	25.4
FH52E-20(10)SA-1SH(**)	580-3352-0 **	10	14.6			———		
FH52E-20(10)SB-1SH(**)	580-3353-0 **	10	14.6			———		
FH52E-50(25)SA-1SH(**)	580-3354-0 **	25	29.6	20.2	44.0	40.4	49.4	45.4
FH52E-50(25)SB-1SH(**)	580-3355-0 **	25	29.6					
FH52E-60(30)SB-1SH(**)	580-3358-0 **	30	34.6	26.2	56.0	52.4	61.4	57.4

[FH52K (Long Metal Fittings Type, 125°C Heat Resistant Type) 0.5mm Pitch product]

Unit : mm

Part No.	HRS No.	No. of contacts	J	K	L	M	N	P
FH52K-6S-0.5SH(**)	580-4613-0 **	6	7.6	11.5	24.0	———	29.4	25.4
FH52K-8S-0.5SH(**)	580-4611-0 **	8	8.6			———		
FH52K-10S-0.5SH(**)	580-4606-0 **	10	9.6			———		
FH52K-12S-0.5SH(**)	Under planning (Note 1)	12	10.6			———		
FH52K-15S-0.5SH(**)		15	12.1			———		
FH52K-18S-0.5SH(**)		18	13.6			———		
FH52K-20S-0.5SH(**)	580-4604-0 **	20	14.6			———		
FH52K-22S-0.5SH(**)	Under planning (Note 1)	22	15.6	14.2	32.0	28.4	37.4	33.4
FH52K-24S-0.5SH(**)		24	16.6					
FH52K-25S-0.5SH(**)		25	17.1					
FH52K-26S-0.5SH(**)		26	17.6					
FH52K-30S-0.5SH(**)		30	19.6	20.2	44.0	40.4	49.4	45.4
FH52K-32S-0.5SH(**)	580-4600-9 **	32	20.6					
FH52K-34S-0.5SH(**)	580-4601-0 **	34	21.6					
FH52K-40S-0.5SH(**)	Under planning (Note 1)	40	24.6					
FH52K-50S-0.5SH(**)		50	29.6					
FH52K-60S-0.5SH(**)		60	34.6	26.2	56.0	52.4	61.4	57.4
FH52K-64S-0.5SH(**)		64	36.6					
FH52K-68S-0.5SH(**)	580-4614-0 **	68	38.6					

Note 1 : Contact positions without HRS No. are currently under planning. Please contact hirose for detailed information about product variation.

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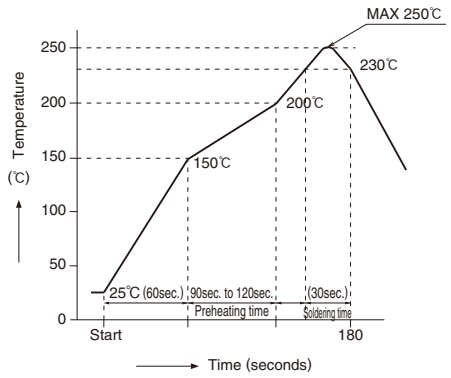
[FH52T (Long Metal Fittings Type, 2-Point Contact Type) 0.5mm Pitch product]

Unit : mm

Part No.	HRS No.	No. of contacts	J	K	L	M	N	P
FH52T-4S-0.5SH(**)	Under planning (Note 1)	4	6.6	7.5	16.0	———	21.4	17.4
FH52T-5S-0.5SH(**)		5	7.1	11.5	24.0	———	29.4	25.4
FH52T-6S-0.5SH(**)		6	7.6			———		
FH52T-8S-0.5SH(**)		8	8.6			———		
FH52T-10S-0.5SH(**)	580-4503-0 **	10	9.6			———		
FH52T-11S-0.5SH(**)	Under planning (Note 1)	11	10.1			———		
FH52T-12S-0.5SH(**)		12	10.6			———		
FH52T-15S-0.5SH(**)		15	12.1			———		
FH52T-16S-0.5SH(**)		16	12.6			———		
FH52T-18S-0.5SH(**)		18	13.6			———		
FH52T-20S-0.5SH(**)		20	14.6			———		
FH52T-22S-0.5SH(**)	Under planning (Note 1)	22	15.6	14.2	32.0	28.4	37.4	33.4
FH52T-24S-0.5SH(**)	580-4500-0 **	24	16.6					
FH52T-25S-0.5SH(**)	Under planning (Note 1)	25	17.1					
FH52T-26S-0.5SH(**)		26	17.6					
FH52T-28S-0.5SH(**)		28	18.6					
FH52T-30S-0.5SH(**)	Under planning (Note 1)	30	19.6	20.2	44.0	40.4	49.4	45.4
FH52T-32S-0.5SH(**)	580-4502-0 **	32	20.6					
FH52T-40S-0.5SH(**)	Under planning (Note 1)	40	24.6					
FH52T-42S-0.5SH(**)		42	25.6					
FH52T-45S-0.5SH(**)		45	27.1					
FH52T-50S-0.5SH(**)	580-4501-7 **	50	29.6					
FH52T-60S-0.5SH(**)	Under planning (Note 1)	60	34.6	26.2	56.0	52.4	61.4	57.4
FH52T-64S-0.5SH(**)		64	36.6					
FH52T-68S-0.5SH(**)		68	38.6					

Note 1 : Contact positions without HRS No. are currently under planning. Please contact hirose for detailed information about product variation.

Recommended Temperature Profile



HRS test condition

Solder method	: Reflow, IR
Reflow furnace atmosphere	: Atmosphere
Solder composition	: Paste, 96.5%Sn/3.0%Ag/0.5%Cu (Senju Metal Industry's Part Number : M705-221CM5-32-10.5)
Test board	: Material and size
Glass epoxy	: 80mm × 100mm × 1.6mm thick
Land dimensions	: 0.3 × 0.85mm
Metal mask dimensions	: 0.12mm thick
Opening dimensions	: 0.25 × 0.85mm

The temperature profiles are based on the above conditions.
In individual applications the actual temperature may vary, depending on solder paste type, volume/thickness and board size/thickness. Consult your solder paste and equipment manufacturer for specific recommendations.

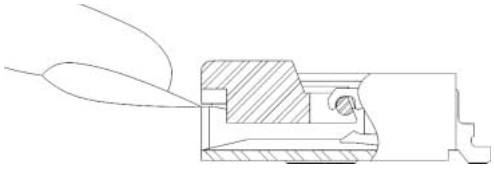
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◆Operation and Precautions

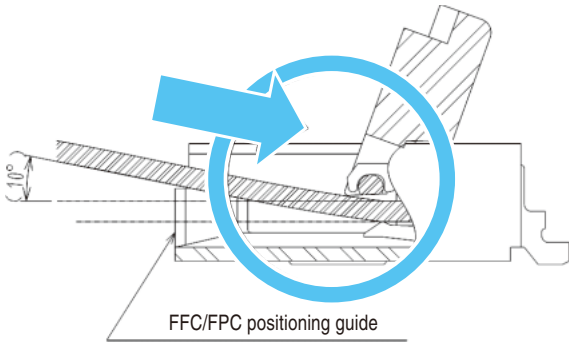
Operation

1. FPC/FFC insertion procedure

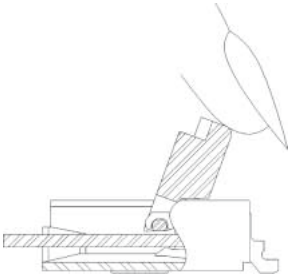
❶Lift up the actuator to release the lock.
You can easily pop it up with the thumbnail or index-finger nail.



❷Insert the FPC or FFC with the exposed conductive traces facing down. When connecting a tabbed FPC or FFC, securely insert it to the bottom, perpendicular to the connector with an angle of 10° with respect to the PCB surface, using the FFC/FPC positioning guide.

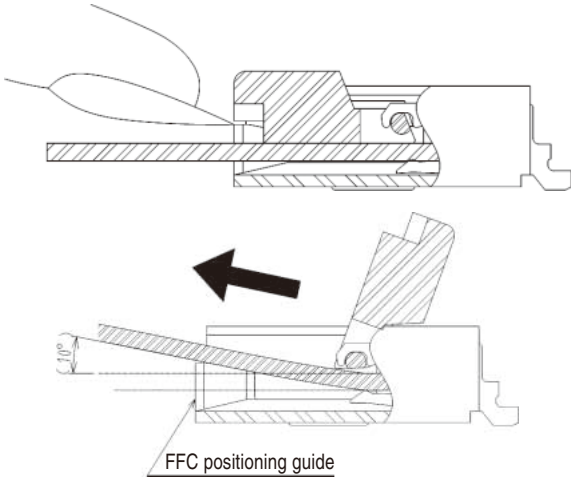


❸Rotate down the actuator until firmly closed.



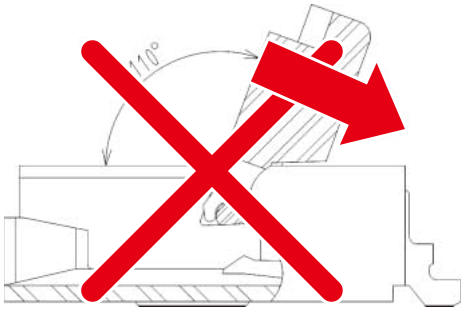
2. FPC/FFC removal

❶Lift up the actuator to release the lock. Pull up the FPC or FFC a little and then withdraw it from the connector.

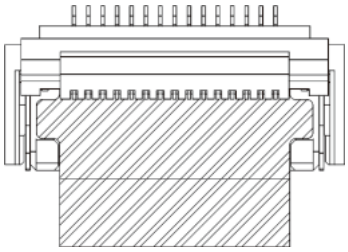


Precautions

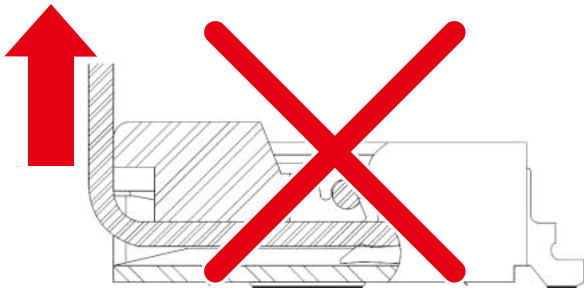
❶The FH52 Series is equipped with an actuator that rotates approximately 110°. Do not apply a force to open it beyond its fully open position. The actuator may come off or be permanently damaged.



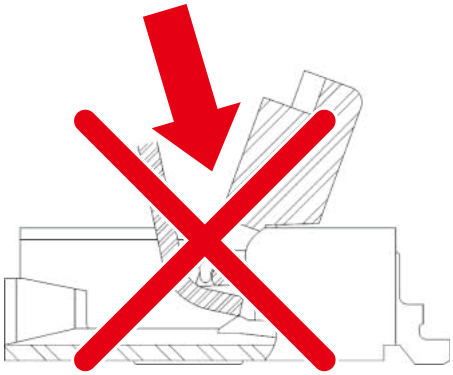
❷Insert the FPC or FFC properly to the opening of the connector. Improper insertion may lead to a break or poor continuity of the FPC or FFC.



❸The connector does not have a strong upward tensile strength owing to its structure. Secure the FPC or FFC when it is subjected to a tensile force.



❹When inserting an FPC or FFC, do not rub it vigorously against the bottom side of the connector opening. Excessive contact between the contacts and the FPC or FFC may result in the deformation of contacts, peeling of conductive traces, or other faults.



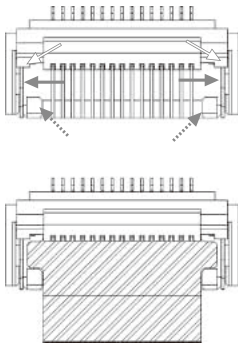
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◆Precautions (Mating/Un-Mating FPC/FFC with the Retention Tabs)

Operation	Precautions

1. How to insert

Insert the cable into the interspace (⋯▶) between the mold walls (⟹) at both ends of entrance where the connector is inserted and the guide walls (⟶) at both ends of interior connector so the cable tabs are properly located.

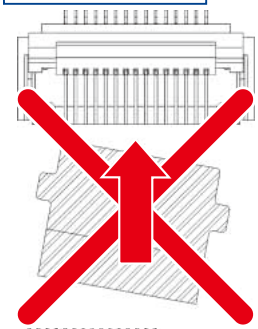


2. Precautions when mating/un-mating

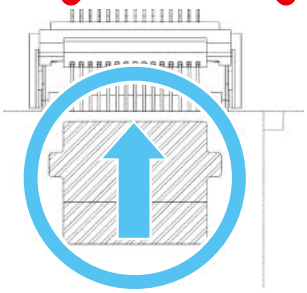
❶Avoid insertion in diagonal direction.

Do not insert the cable in diagonal direction.
A part of the connector may touches the contacts resulting in deformation of the contacts.

Diagonal insertion



Be sure to insert the FPC or FFC straight into the connector opening until the bottom of the connector.

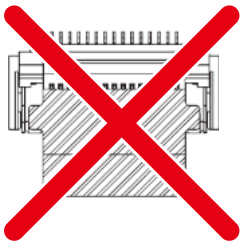


Perpendicular to the connector

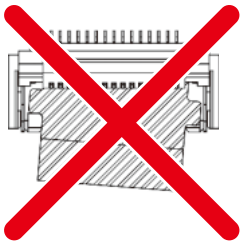
❷Avoid “ride on”

Avoid insertion so the cables ride on any guide. Be sure NOT to close the actuator as the cables ride on any guide. It may cause conduction failure.

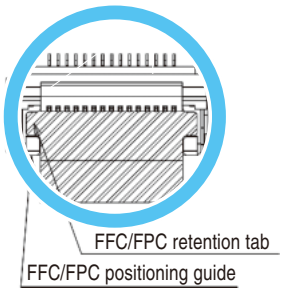
Ride on the both guides



Ride on the right guide



Correct insertion



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http://www.hirose-connectors.com

HRS The characteristics and the specifications contained herein are for reference purpose. Please refer to the latest customer drawings prior to use.
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ZE05-24DP-2H ZE05H-4P-2V(A) BM29B0.6-4DS/2-0.35V(51) DF11-16DP-2DSA(24) DF33C-4S-3.3C DF52-4P-0.8C FH41-50S-0.5SH(28) DF62C-4S-2.2C FH35C-19S-0.3SHW(50) ZE064W-8DP-HU/R(A) FX18-80S-0.8SH FX8-120S-SV(22) ZE05H-12DP-2H DF40C-50DP-0.4V(51) ZH05-20DP-HU(B) DF19A-3032SCFA(41) DF59M-2224PCF FX18-60S-0.8SH RM15TP-2PA(81) DF17(3.0)-40DS-0.5V(57) RM15TRH-10PH(81) DF22A-1416SCFA DF36A-25P-SHL DF57AH-5S-1.2C HDE-CTH(10) RM12BRD-2PH(81) DF65-4P-1.7V(21) FH41-30S-0.5SH(05) FH72-21S-0.3SHW GT8E-6S-HU