PRODUCT CATALOG

HIROSE ELECTRIC CO.,LTD.

FH52 Series

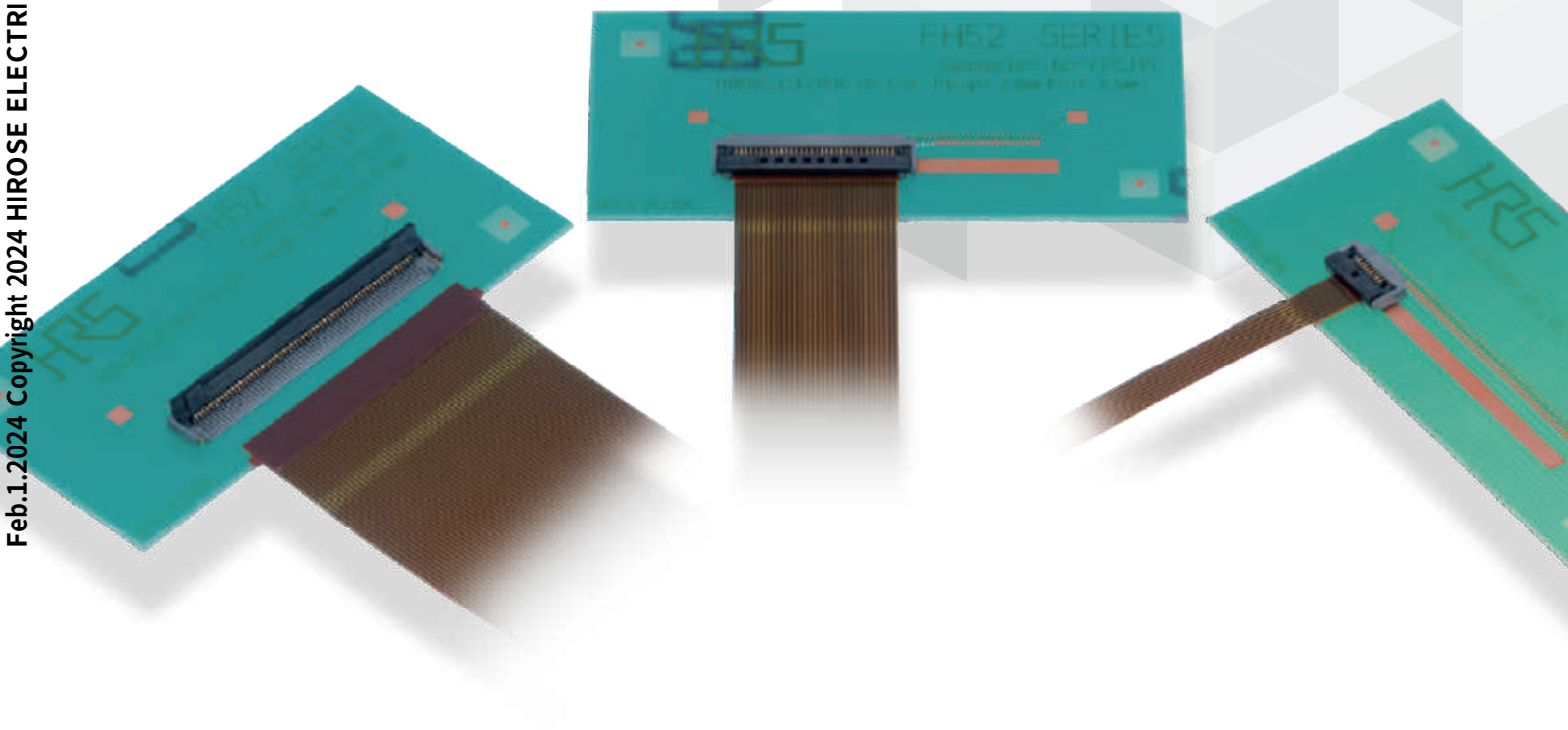
0.5mm/1.0mm Pitch, 2.0mm Height, Bottom Contact, Front Flip, FPC/FFC Connector

FH™ Flip-Lock Pioneer Hirose

P=0.5/1.0mm

Heat-Resist

Wide Variation



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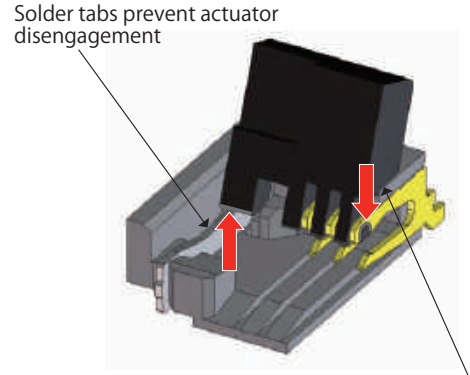
Product Page
https://www.hirose.com/en/product/series/FH52

Sep. 2023

Features

1. Highly reliable connection and robust design

Higher connector body strength and FPC/FFC connection reliability are required even more than before as connectors continue to be produced with higher pin counts. Compared with existing products (HRS 0.5mm pitch standard connector FH12 Series horizontal mounting type), FH52 Series has higher connection reliability due to the FPC/FFC positioning mechanism and provides a secure connection that prevents unlocking due to the original, robust design.

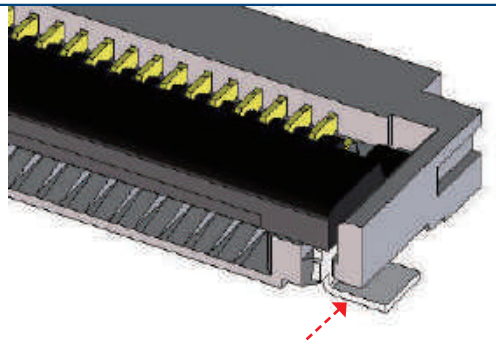


Secure Actuator Retention

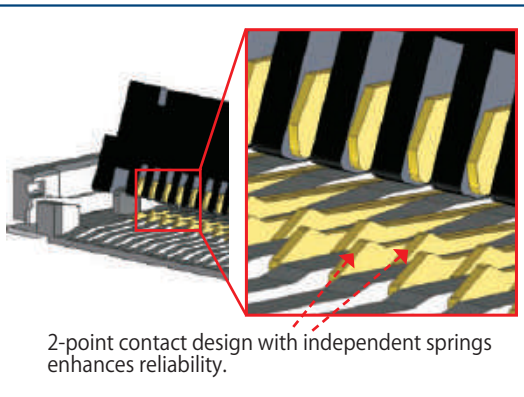
2. Product variations that meet a variety of needs

- FH52E : Long solder tabs type
  Solder tabs extending from the connector body enable visual inspection of the soldering conditions.
- FH52K : Long solder tabs and 125℃ (Note) heat resistance type
  125℃ heat resistant connector meets severe automotive requirements.
- FH52T : Long solder tabs and 2-point contact type
  The 2 independent spring design connects with the FPC/FFC at 2 points, preventing contact failure due to dust adhesion.

Note : The heat resistant when using FFC is 105℃. When the heat resistant temperature is less than 125℃ for FPC and 105℃ for FFC, the heat resistant temperature of the FPC/FFC is applied.



Long Solder Tabs Type (FH52E/FH52K/FH52T)



2-Point Contact (FH52T)

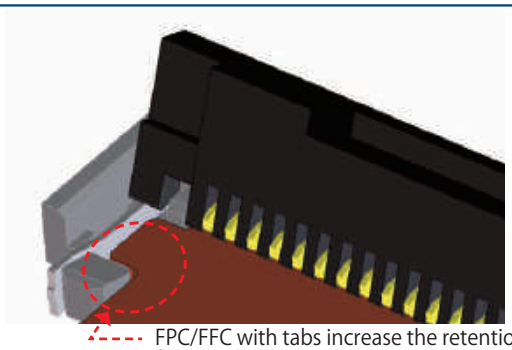
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3. Flip lock simplifies operations

The flip lock (one-touch rotation) design enables easier FPC/FFC connection operation with less force. The clear tactile click upon locking is enhanced compared to existing products (FH12 horizontal mounting type) for a secure connection.

4. High FPC/FFC retention force

Tabbed FPC/FFCs enhanced retention force in the horizontal direction.



Connection Utilizing FPC/FFC Position Alignment Design

5. Accepts standard 0.3mm thick FPC/FFC

Compatible 0.3mm thickness FPC/FFC, which are easy to manufacture and have superb insertion performance

6. No pattern prohibited area on the bottom of the connector (Overmolding design)

The bottom surface of the connector is fully enclosed to eliminate contact exposure, removing PCB pattern restrictions and enhancing board design flexibility.

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 : 900ppm or less, Cl : 900ppm or less,
Br+Cl : 1,500ppm or less

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8. Supports automatic pick & place mounting

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

9. 500pcs per reel packing option available

The standard packaging is 3,000pcs per reel, but FH52 is also offered in 500pcs per reel. (The reel outer diameter is ϕ180mm for the 500pcs per reel option)

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Product Specifications

Rated Current (Note 1)	0.5A	Operating Temperature (Note 2)(Note 3)	-40 to +105℃
Rated Voltage	50V AC	Operating Humidity Range	RH 90% Max. (No Condensation)
		Storage Temperature Range (Note 4)	-10 to +50℃
		Storage Humidity Range (Note 4)	RH 90% Max. (No Condensation)

Adaptive FPC/FFC Contact Specifications	Thickness : = 0.3±0.05mm Gold Plated

Items	Specifications	Conditions
Insulation Resistance	500MΩ Min.	100V DC
Withstanding Voltage	No flashover or insulation breakdown	150Vms AC for 1 min.
Contact Resistance	50mΩ Max. Includes FPC/FFC conductor resistance	1mA (DC or 1000Hz)
Mating Durability (Insertion / Withdrawal)	Contact Resistance : 50mΩ Max. No damage, cracks, or parts dislocation	20 cycles
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
Shock	No electrical discontinuity of 1μs or more Contact Resistance : 50mΩ Max. No damage, cracks, or parts dislocation	Acceleration of 981m/s^2, duration of 6 ms, sine half-wave waveform, 3 cycles in each of the 3 axes
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%
Temperature Cycle	Contact Resistance : 50mΩ Max. Insulation Resistance : 50MΩ Min. No damage, cracks, or parts dislocation	Temperature : -40 → +15 to +35 → +105 (Note 3) → +15 to +35℃ Time : 30 → 2 to 3 → 30 → 2 to 3 (Minutes) 5 cycles
Resistance to Soldering Heat	No deformation of components affecting performance	Reflow : Peak temperature 250℃ Max., 230℃ or more, 60 seconds or less Manual soldering : 350±10℃ 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 : FH52K withstands up to 125℃. The heat resistant when using FFC is 105℃. When the heat resistant temperature is less than 125℃ for FPC and 105℃ for FFC, the heat resistant temperature of the FPC/FFC is applied.
Note 4 : 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.

Materials / Finish

Part	Materials	Color/Finish	Remarks
Insulator	LCP	Grey	UL94V-0
		Black	
Contacts	Copper Alloy	Partially Gold Plated	-
Solder Tabs	Brass	Tin Plated	

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Product Number Structure

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

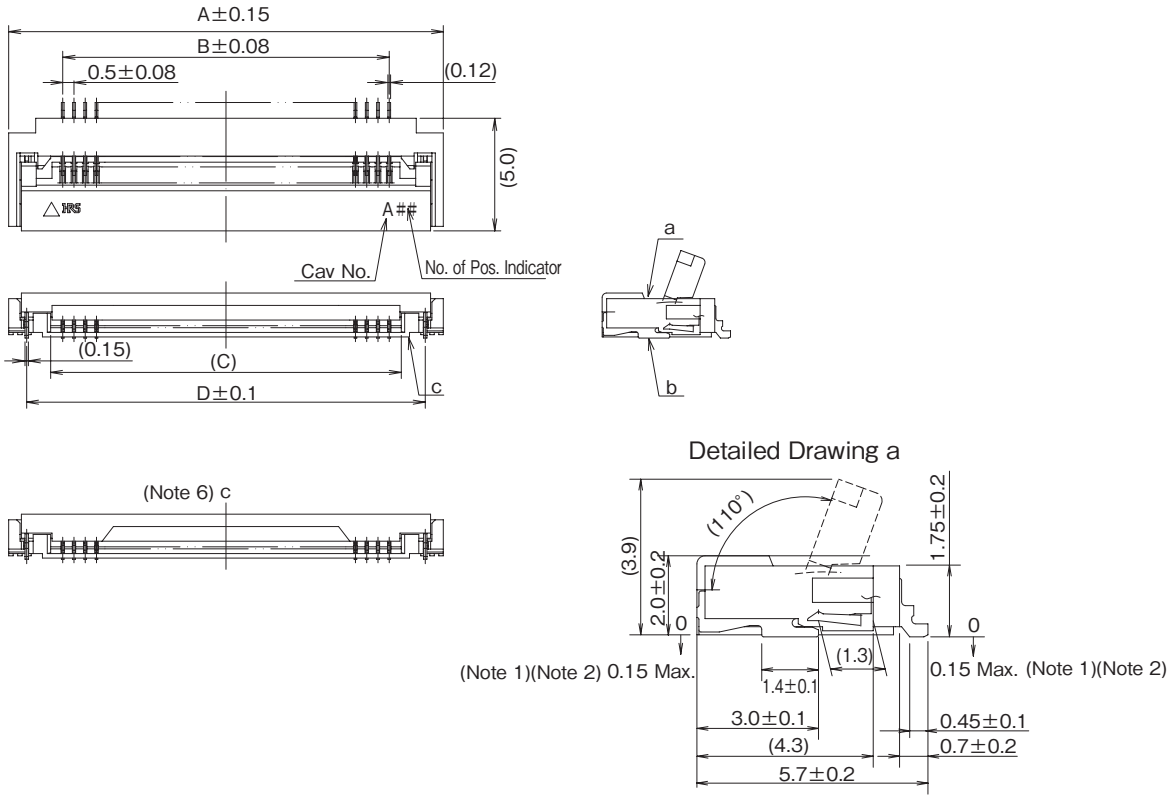
FH52 E – 50 (25) S B – 0.5 SH (##)
❶ ❷ ❸ ❹ ❺ ❻ ❼ ❽ ❾

❶ Series Name	FH52	❺ Contact Arrangement	Single (pole piece array)
❷ Connector Type	Blank : Standard Type E : Long Solder Tabs Type K : Long Solder Tabs, 125℃ Heat Resistant Type T : Long Solder Tabs, 2-Point Contact Type	❻ Alternating Direction	No Symbol : Standard Type (All Contacts Loaded) A : Alternating Contact Type (Alternating on the Polarity Side) B : Alternating Contact Type (Alternating on Opposite the Polarity Side)
		❼ Contact Pitch	0.5mm, 1mm
❸ No. of Pos.	Standard Type : No. of Pos. Alternating Contact Type : Mold Size	❽ Termination Type	SH : SMT Horizontal Mounting Type
❹ No. of Pos.	Standard Type : No Symbol Alternating Contact Type : No. of Pos.	❾ Specification	Blank : Standard, Partially Gold Plated, 3,000pcs per reel (99) : Partially Gold Plated, 500pcs per reel

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Connector Dimensional Drawing

■FH52 (Standard Type) 0.5mm Pitch Product



Note 1 : The coplanarity of the contact and solder tab lead is 0.1 Max.
Note 2 : The contact lead position indicates the dimension from b, the bottom surface of the insulator body.
Note 3 : Packaged in tape and reel only. Check the "Packaging Specification" for details.
Note 4 : Sink mark reliefs may be added due to improvements.
Note 5 : Sight variations in color of the plastic compounds do not affect form, fit or function. After reflow, the contact plating may change color, however this does not represent a quality issue.
Note 6 : The actuator design of the 60pos. type are shown in the figure.

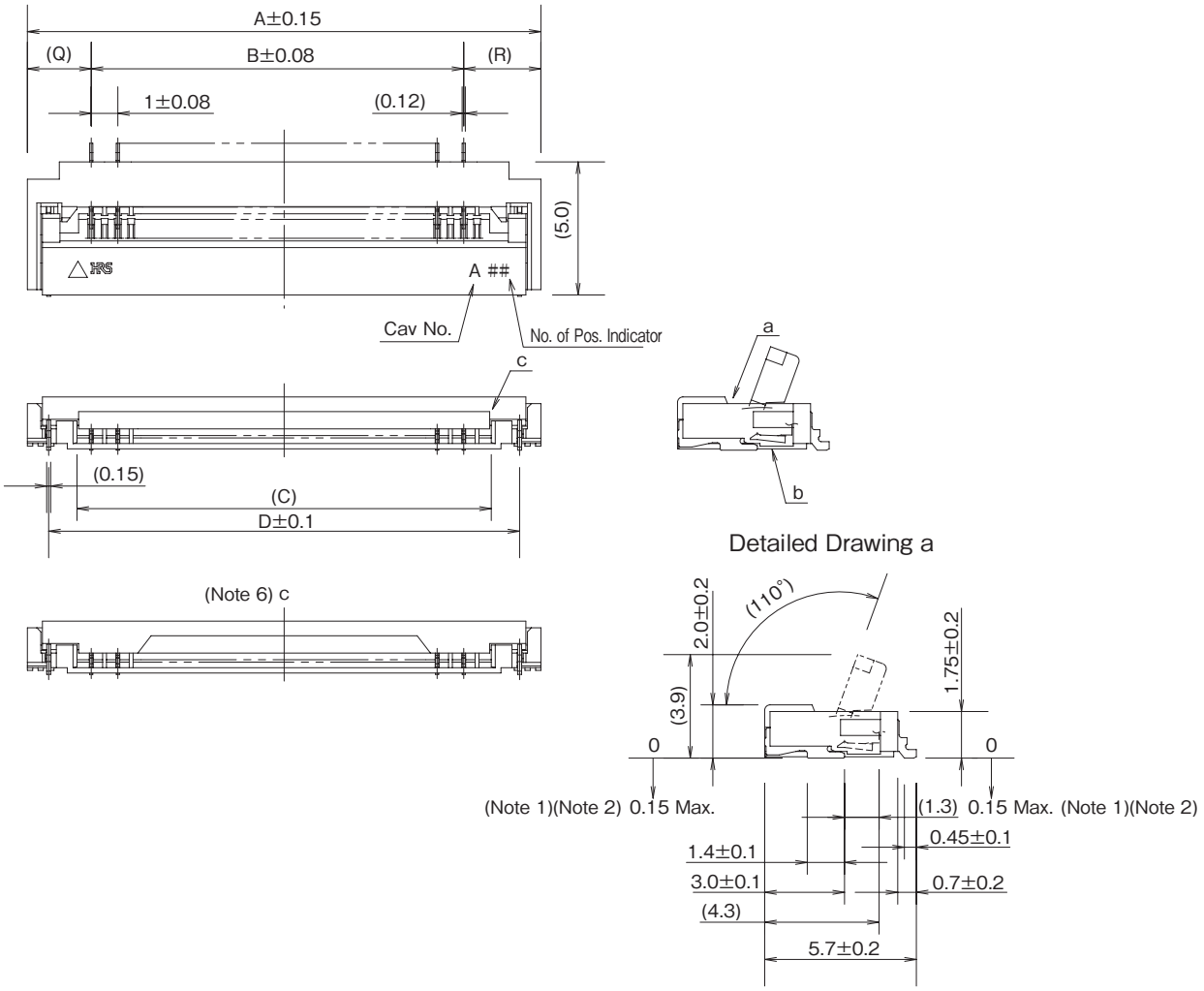
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Unit : mm

Part No.	HRS No.	No. of Pos.	A	B	C	D	Purchase Unit (##) : (00)	Purchase Unit (##) : (99)
FH52-6S-0.5SH(##)	CL0580-3304-0-##	6	7.3	2.5	3.57	5.7	3,000pcs per reel	500pcs per reel
FH52-8S-0.5SH(##)	CL0580-3305-3-##	8	8.3	3.5	4.57	6.7		
FH52-10S-0.5SH(##)	CL0580-3306-6-##	10	9.3	4.5	5.57	7.7		
FH52-11S-0.5SH(##)	CL0580-3320-7-##	11	9.8	5.0	6.07	8.2		
FH52-12S-0.5SH(##)	CL0580-3307-9-##	12	10.3	5.5	6.57	8.7		
FH52-15S-0.5SH(##)	CL0580-3302-5-##	15	11.8	7.0	8.07	10.2		
FH52-18S-0.5SH(##)	CL0580-3321-0-##	18	13.3	8.5	9.57	11.7		
FH52-20S-0.5SH(##)	CL0580-3309-4-##	20	14.3	9.5	10.57	12.7		
FH52-22S-0.5SH(##)	CL0580-3317-2-##	22	15.3	10.5	11.57	13.7		
FH52-24S-0.5SH(##)	CL0580-3318-5-##	24	16.3	11.5	12.57	14.7		
FH52-25S-0.5SH(##)	CL0580-3316-0-##	25	16.8	12.0	13.07	15.2		
FH52-26S-0.5SH(##)	CL0580-3319-8-##	26	17.3	12.5	13.57	15.7		
FH52-28S-0.5SH(##)	CL0580-3324-8-##	28	18.3	13.5	14.57	16.7		
FH52-30S-0.5SH(##)	CL0580-3310-3-##	30	19.3	14.5	15.57	17.7		
FH52-32S-0.5SH(##)	CL0580-3325-0-##	32	20.3	15.5	16.57	18.7		
FH52-40S-0.5SH(##)	CL0580-3300-0-##	40	24.3	19.5	20.57	22.7		
FH52-42S-0.5SH(##)	CL0580-3329-1-##	42	25.3	20.5	21.57	23.7		
FH52-45S-0.5SH(##)	CL0580-3311-6-##	45	26.8	22.0	23.07	25.2		
FH52-50S-0.5SH(##)	CL0580-3303-8-##	50	29.3	24.5	25.57	27.7		
FH52-60S-0.5SH(##)	CL0580-3301-2-##	60	34.3	29.5	30.57	32.7		

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■FH52 (Standard Type) 1.0mm Pitch Product



Note 1 : The coplanarity of the contact and solder tab lead is 0.1 Max.
Note 2 : The contact lead position indicates the dimension from b, the bottom surface of the insulator body.
Note 3 : Packaged in tape and reel only. Check the "Packaging Specification" for details.
Note 4 : Sink mark reliefs may be added due to improvements.
Note 5 : Sight variations in color of the plastic compounds do not affect form, fit or function. After reflow, the contact plating may change color, however this does not represent a quality issue.
Note 6 : The actuator design of the 30pos. type are shown in the figure.

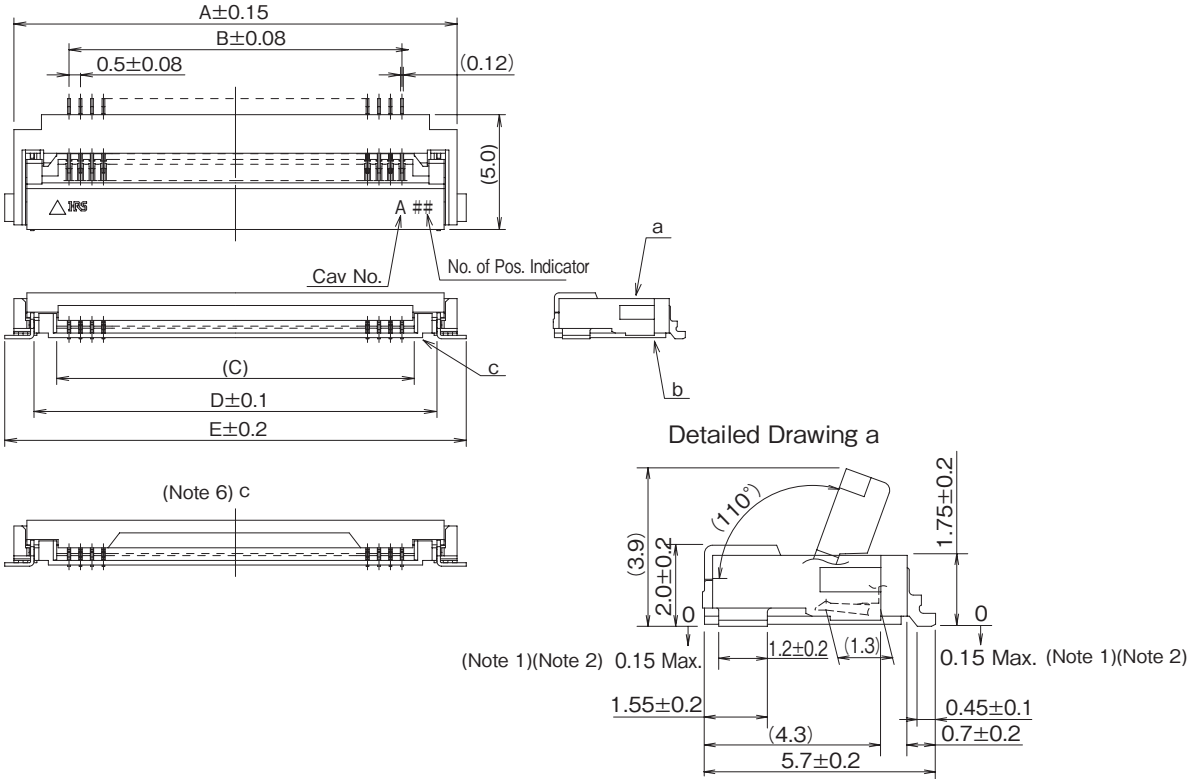
Unit : mm

Part No.	HRS No.	No. of Pos.	A	B	C	D	Q	R	Purchase Unit (##) : (00)	Purchase Unit (##) : (99)
FH52-10(4)SA-1SH(##)	CL0580-3330-0-##	4	9.3	3	5.57	7.7	2.9	3.4	3,000pcs per reel	500pcs per reel
FH52-5S-1SH(##) (Note)	CL0580-3336-7-##	5	9.8	4.0	6.07	8.2	2.9	2.9		
FH52-12S-1SH(##)	CL0580-3323-5-##	12	16.8	11	13.07	15.2	2.9	2.9		
FH52-32(16)SB-1SH(##) (Note)	CL0580-3338-2-##	16	20.3	15	16.57	18.7	2.4	2.9		
FH52-60(30)SB-1SH(##)	CL0580-3315-7-##	30	34.3	29	30.57	32.7	2.4	2.9		

Note : The (99) specification is only available for 4, 12 and 30pos.

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■FH52E (Long Solder Tabs Type) 0.5mm Pitch Product



Note 1 : The coplanarity of the contact and solder tab lead is 0.1 Max.
Note 2 : The contact lead position indicates the dimension from b, the bottom surface of the insulator body.
Note 3 : Packaged in tape and reel only. Check the "Packaging Specification" for details.
Note 4 : Sink mark reliefs may be added due to improvements
Note 5 : Sight variations in color of the plastic compounds do not affect form, fit or function. After reflow, the contact plating may change color, however this does not represent a quality issue.
Note 6 : The actuator design of the 60pos. type are shown in the figure.

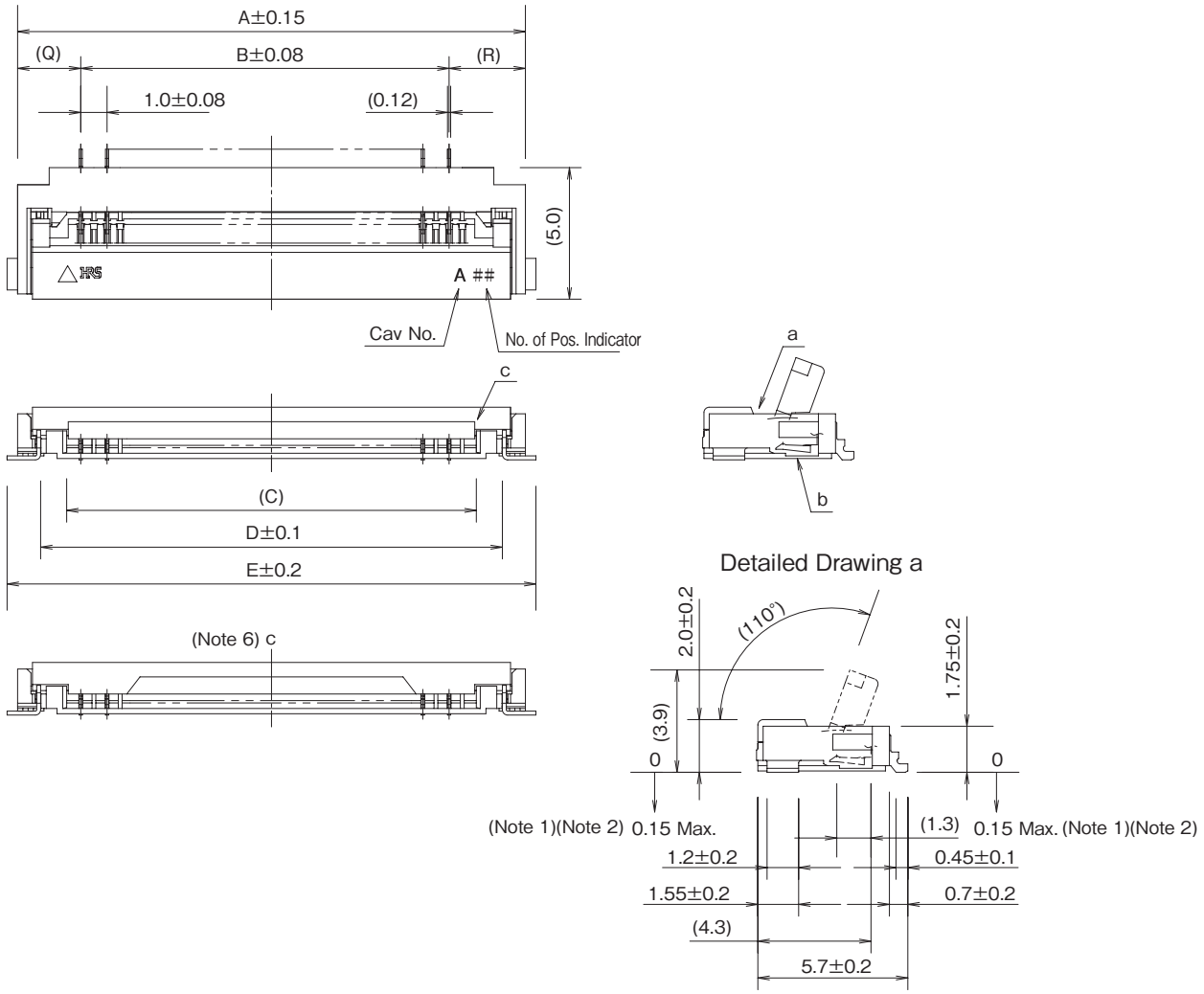
Unit : mm

Part No.	HRS No.	No. of Pos.	A	B	C	D	E	Purchase Unit (##) : (00)	Purchase Unit (##) : (99)
FH52E-6S-0.5SH(##)	CL0580-3365-0-##	6	7.3	2.5	3.57	5.55	8.1	3,000pcs per reel	500pcs per reel
FH52E-8S-0.5SH(##)	CL0580-3349-0-##	8	8.3	3.5	4.57	6.55	9.1		
FH52E-10S-0.5SH(##)	CL0580-3346-0-##	10	9.3	4.5	5.57	7.55	10.1		
FH52E-15S-0.5SH(##)	CL0580-3337-0-##	15	11.8	7.0	8.07	10.05	12.6		
FH52E-18S-0.5SH(##)	CL0580-3331-3-##	18	13.3	8.5	9.57	11.55	14.1		
FH52E-20S-0.5SH(##)	CL0580-3357-0-##	20	14.3	9.5	10.57	12.55	15.1		
FH52E-22S-0.5SH(##)	CL0580-3343-2-##	22	15.3	10.5	11.57	13.55	16.1		
FH52E-24S-0.5SH(##)	CL0580-3340-4-##	24	16.3	11.5	12.57	14.55	17.1		
FH52E-26S-0.5SH(##) (Note)	CL0580-3366-0-##	26	17.3	12.5	13.57	15.55	18.1		
FH52E-30S-0.5SH(##)	CL0580-3347-3-##	30	19.3	14.5	15.57	17.55	20.1		
FH52E-40S-0.5SH(##)	CL0580-3334-1-##	40	24.3	19.5	20.57	22.55	25.1		
FH52E-45S-0.5SH(##)	CL0580-3368-0-##	45	26.8	22.0	23.07	25.05	27.6		
FH52E-50S-0.5SH(##)	CL0580-3335-4-##	50	29.3	24.5	25.57	27.55	30.1		
FH52E-60S-0.5SH(##)	CL0580-3339-5-##	60	34.3	29.5	30.57	32.55	35.1		
FH52E-64S-0.5SH(##)	CL0580-3333-9-##	64	36.3	31.5	32.57	34.55	37.1		
FH52E-68S-0.5SH(##)	CL0580-3332-6-##	68	38.3	33.5	34.57	36.55	39.1		

Note : The (99) specification is available for all positions except 26pos.

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■FH52E (Long Solder Tabs Type) 1.0mm Pitch Product



Note 1 : The coplanarity of the contact and solder tab lead is 0.1 Max.
Note 2 : The contact lead position indicates the dimension from b, the bottom surface of the insulator body.
Note 3 : Packaged in tape and reel only. Check the "Packaging Specification" for details.
Note 4 : Sink mark reliefs may be added due to improvements
Note 5 : Sight variations in color of the plastic compounds do not affect form, fit or function. After reflow, the contact plating may change color, however this does not represent a quality issue.
Note 6 : The actuator design of the 30pos. type are shown in the figure.

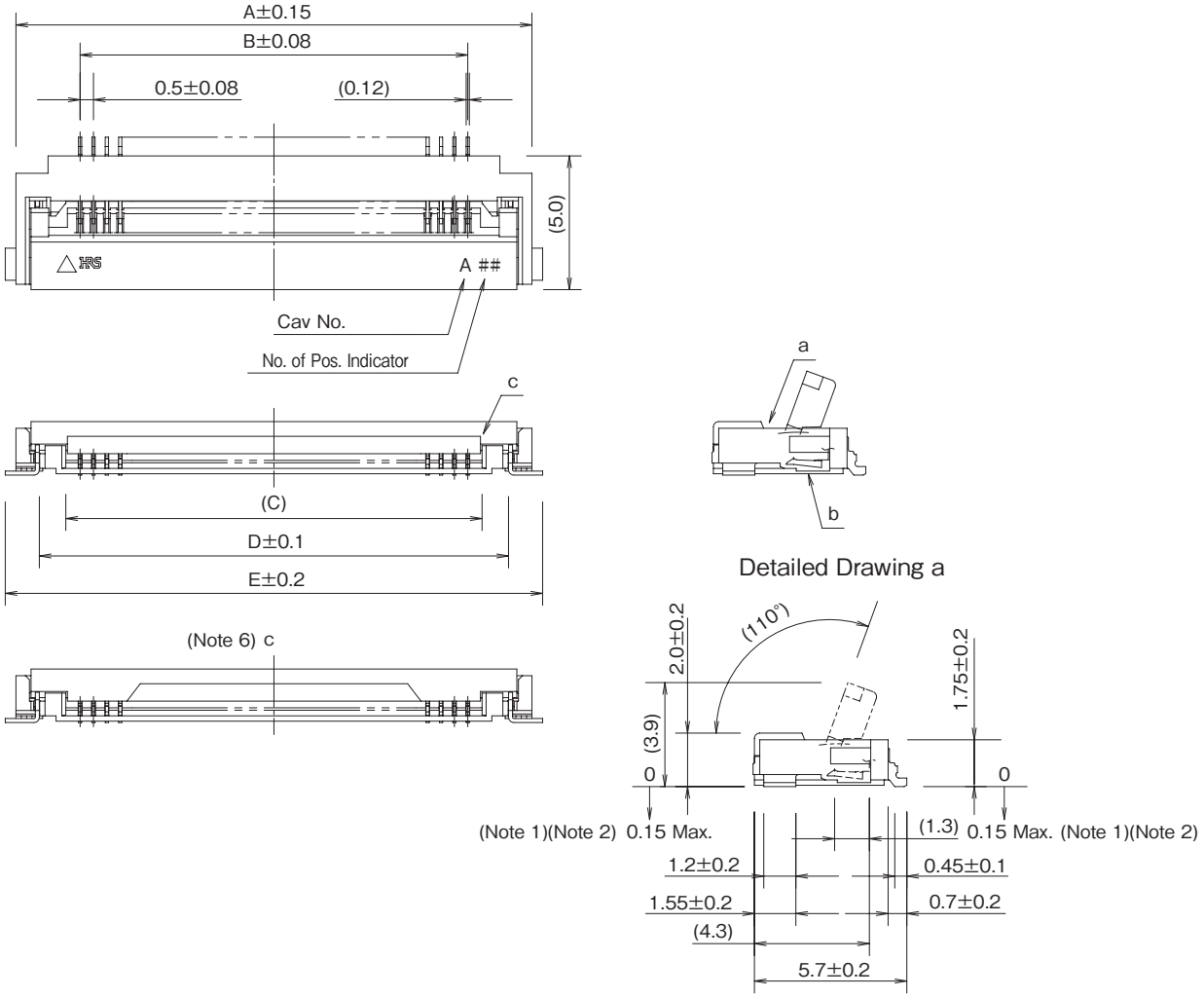
Unit : mm

Part No.	HRS No.	No. of Pos.	A	B	C	D	E	Q	R	Purchase Unit (##) : (00)	Purchase Unit (##) : (99)
FH52E-8(4)SB-1SH(##)	CL0580-3351-0-##	4	8.3	3.0	4.57	6.55	9.1	2.4	2.9	3,000pcs per reel	500pcs per reel
FH52E-20(10)SA-1SH(##)	CL0580-3352-0-##	10	14.3	9.0	10.57	12.55	15.1	2.9	2.4		
FH52E-20(10)SB-1SH(##)	CL0580-3353-0-##	10	14.3	9.0	10.57	12.55	15.1	2.4	2.9		
FH52E-50(25)SA-1SH(##)	CL0580-3354-0-##	25	29.3	24.0	25.57	27.55	30.1	2.9	2.4		
FH52E-50(25)SB-1SH(##)	CL0580-3355-0-##	25	29.3	24.0	25.57	27.55	30.1	2.4	2.9		
FH52E-60(30)SB-1SH(##) (Note)	CL0580-3358-0-##	30	34.3	29.0	30.57	32.55	35.1	2.4	2.9		

Note : The (99) specification is available for all positions except 30pos.

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■FH52K (Long Solder Tabs, 125℃ Heat Resistant Type) 0.5mm Pitch Product



Note 1 : The coplanarity of the contact and solder tab lead is 0.1 Max.
Note 2 : The contact terminal lead position indicates the dimension from b, the bottom surface of the insulator body.
Note 3 : Packaged in tape and reel only. Check the "Packaging Specification" for details.
Note 4 : Sink mark reliefs may be added due to improvements
Note 5 : Sight variations in color of the plastic compounds do not affect form, fit or function. After reflow, the contact plating may change color, however this does not represent a quality issue.
Note 6 : The actuator design of the 60pos. type are shown in the figure.

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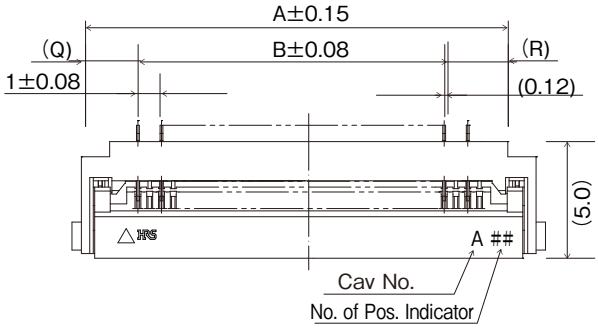
Unit : mm

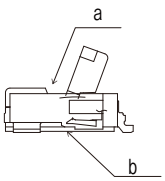
Part No.	HRS No.	No. of Pos.	A	B	C	D	E	Purchase Unit (##) : (00)	Purchase Unit (##) : (99)
FH52K-6S-0.5SH(##)	CL0580-4613-0-##	6	7.3	2.5	3.57	5.55	8.1	3,000pcs per reel	500pcs per reel
FH52K-8S-0.5SH(##)	CL0580-4611-0-##	8	8.3	3.5	4.57	6.55	9.1		
FH52K-10S-0.5SH(##)	CL0580-4606-0-##	10	9.3	4.5	5.57	7.55	10.1		
FH52K-12S-0.5SH(##)	CL0580-4629-0-##	12	10.3	5.5	6.57	8.55	11.1		
FH52K-15S-0.5SH(##)	CL0580-4617-0-##	15	11.8	7.0	8.07	10.05	12.6		
FH52K-18S-0.5SH(##)	CL0580-4636-0-##	18	13.3	8.5	9.57	11.55	14.1		
FH52K-20S-0.5SH(##)	CL0580-4604-0-##	20	14.3	9.5	10.57	12.55	15.1		
FH52K-22S-0.5SH(##)	CL0580-4632-0-##	22	15.3	10.5	11.57	13.55	16.1		
FH52K-24S-0.5SH(##)	CL0580-4633-0-##	24	16.3	11.5	12.57	14.55	17.1		
FH52K-25S-0.5SH(##)	CL0580-4634-0-##	25	16.8	12.0	13.07	15.05	17.6		
FH52K-26S-0.5SH(##)	CL0580-4635-0-##	26	17.3	12.5	13.57	15.55	18.1		
FH52K-30S-0.5SH(##)	CL0580-4631-0-##	30	19.3	14.5	15.57	17.55	20.1		
FH52K-32S-0.5SH(##)	CL0580-4600-9-##	32	20.3	15.5	16.57	18.55	21.1		
FH52K-34S-0.5SH(##)	CL0580-4601-0-##	34	21.3	16.5	17.57	19.55	22.1		
FH52K-40S-0.5SH(##)	CL0580-4620-0-##	40	24.3	19.5	20.57	22.55	25.1		
FH52K-45S-0.5SH(##)	CL0580-4637-0-##	45	26.8	22.0	23.07	25.05	27.6		
FH52K-50S-0.5SH(##)	CL0580-4609-0-##	50	29.3	24.5	25.57	27.55	30.1		
FH52K-60S-0.5SH(##)	CL0580-4607-0-##	60	34.3	29.5	30.57	32.55	35.1		
FH52K-68S-0.5SH(##)	CL0580-4614-0-##	68	38.3	33.5	34.57	36.55	39.1		
FH52K-80S-0.5SH(05) (Note)	CL0580-4641-0-05	80	44.3	39.5	40.57	42.55	45.1	-	-

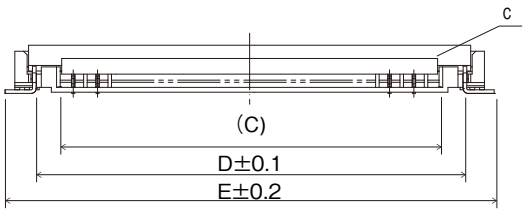
Note : The (05) specification is available for 80pos. only. The purchase unit is 2,000pcs per reel for specification (05) of FH52K-80S-0.5SH.

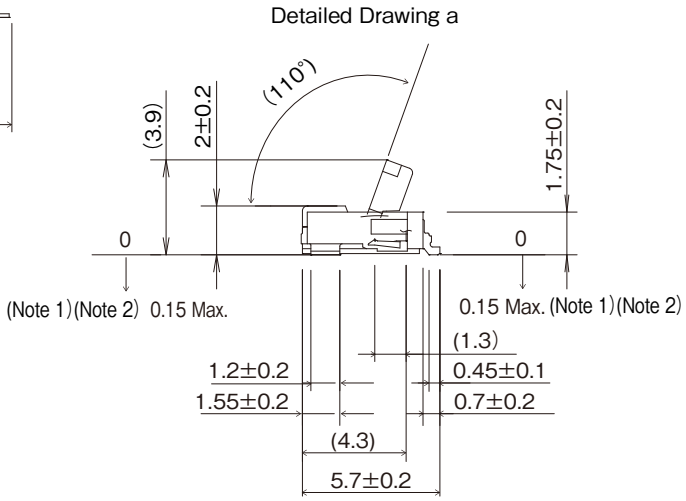
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■FH52K (Long Solder Tabs, 125℃ Heat Resistant Type) 1.0mm Pitch Product









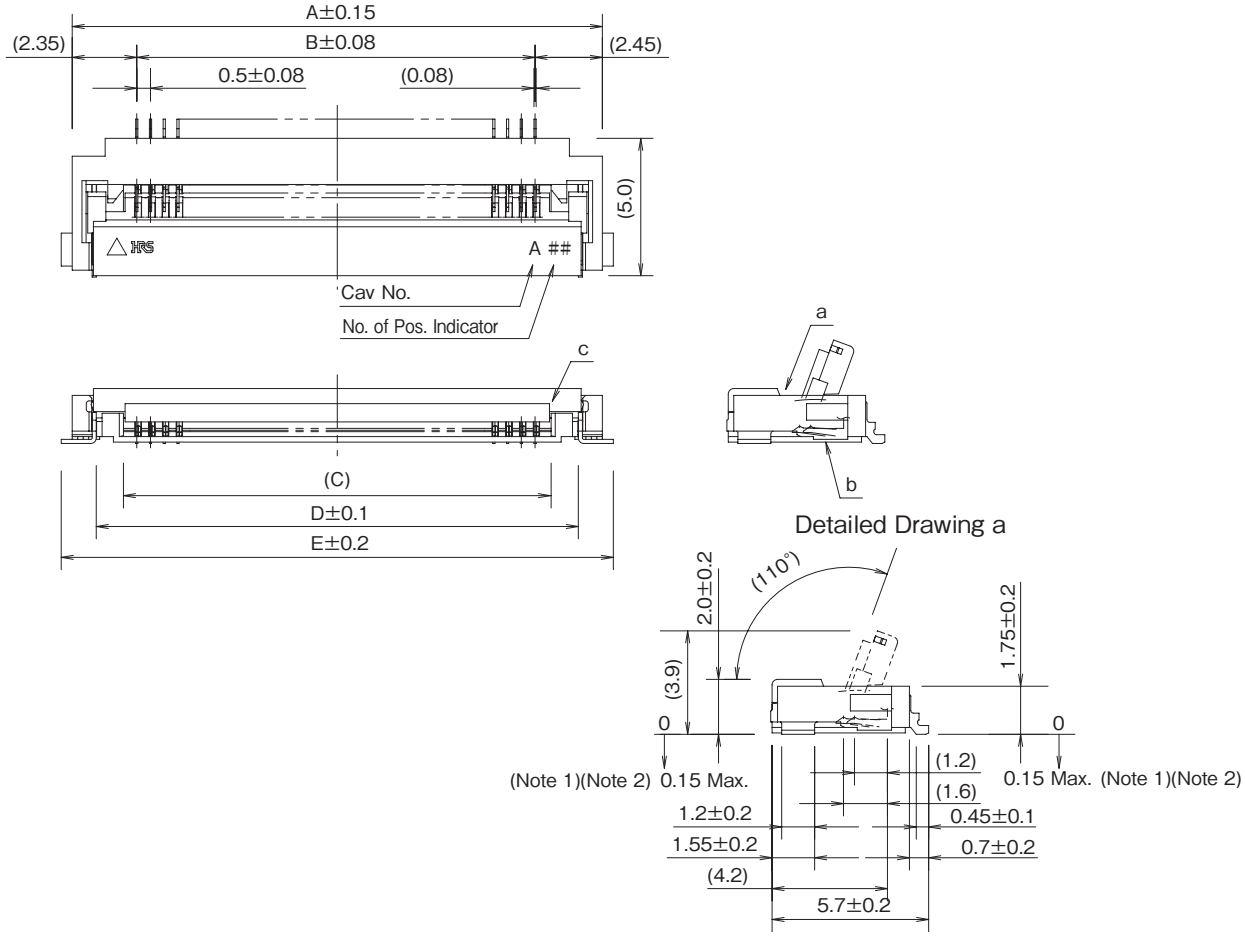
Note 1 : The coplanarity of the contact and solder tab lead is 0.1 Max.
Note 2 : The contact lead position indicates the dimension from b, the bottom surface of the insulator body.
Note 3 : Packaged in tape and reel only. Check the "Packaging Specification" for details.
Note 4 : Sink mark reliefs may be added due to improvements
Note 5 : Sight variations in color of the plastic compounds do not affect form, fit or function. After reflow, the contact plating may change color, however this does not represent a quality issue.

Unit : mm

Part No.	HRS No.	No. of Pos.	A	B	C	D	E	Q	R	Purchase Unit (##) : (00)	Purchase Unit (##) : (99)
FH52K-12(6)SA-1SH(##)	CL0580-4638-0-##	6	10.3	5.0	6.57	8.55	11.1	2.9	2.4	3,000pcs per reel	500pcs per reel
FH52K-20(10)SB-1SH(##)	CL0580-4630-0-##	10	14.3	9.0	10.57	12.55	15.1	2.4	2.9		

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■FH52T (Long Solder Tabs, 2-Point Contact Type) 0.5mm Pitch Product



Note 1 : The coplanarity of the contact and solder tab lead is 0.1 Max.
Note 2 : The contact lead position indicates the dimension from b, the bottom surface of the insulator body.
Note 3 : Packaged in tape and reel only. Check the "Packaging Specification" for details.
Note 4 : Sink mark reliefs may be added due to improvements
Note 5 : Sight variations in color of the plastic compounds do not affect form, fit or function. After reflow, the contact plating may change color, however this does not represent a quality issue.

Unit : mm

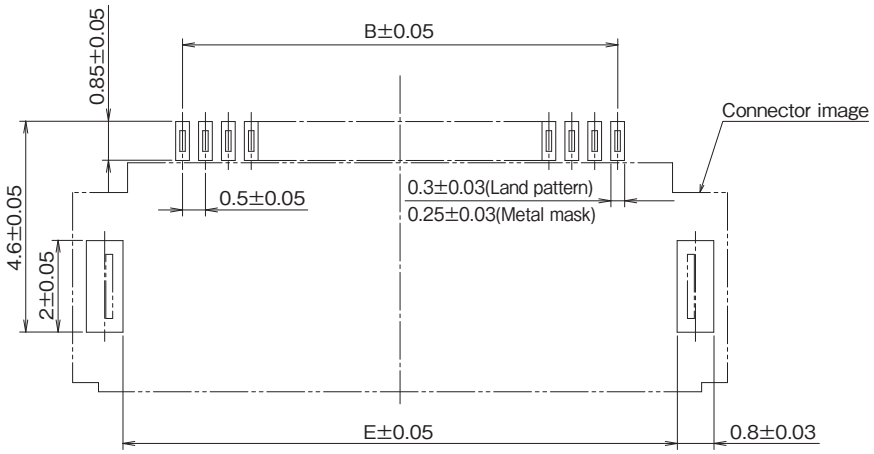
Part No.	HRS No.	No. of Pos.	A	B	C	D	E	Purchase Unit (##) : (00)	Purchase Unit (##) : (99)
FH52T-10S-0.5SH(##)	CL0580-4503-0-##	10	9.3	4.5	5.57	7.55	10.1	3,000pcs per reel	500pcs per reel
FH52T-24S-0.5SH(##)	CL0580-4500-0-##	24	16.3	11.5	12.57	14.55	17.1		
FH52T-32S-0.5SH(##)	CL0580-4502-0-##	32	20.3	15.5	16.57	18.55	21.1		
FH52T-50S-0.5SH(##)	CL0580-4501-7-##	50	29.3	24.5	25.57	27.55	30.1		

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■FH52 (Standard Type) 0.5mm Pitch Product

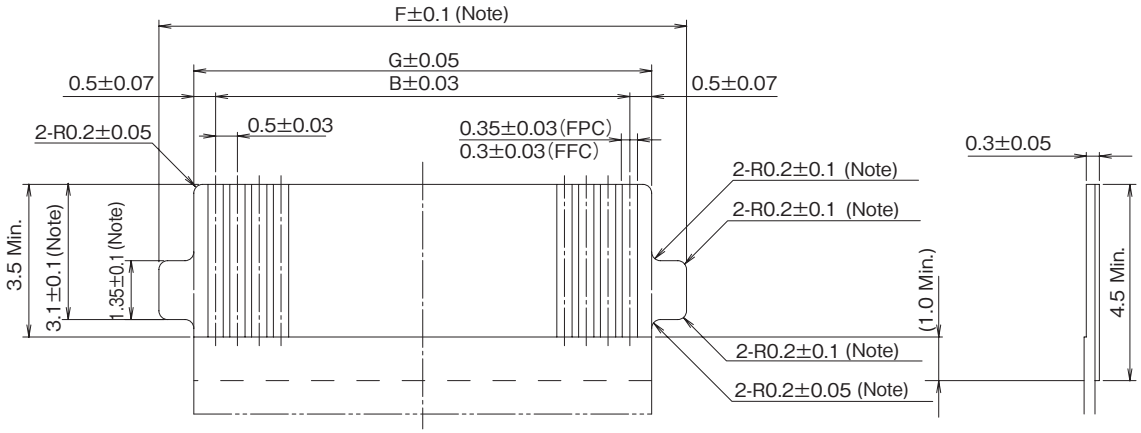
●Recommended PCB Mounting Pattern and Metal Mask Dimensions

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



Note : FPC/FFC without tabs can also be used.
When using FPC/FFC without tabs the specified dimensions are not necessary.

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Unit : mm

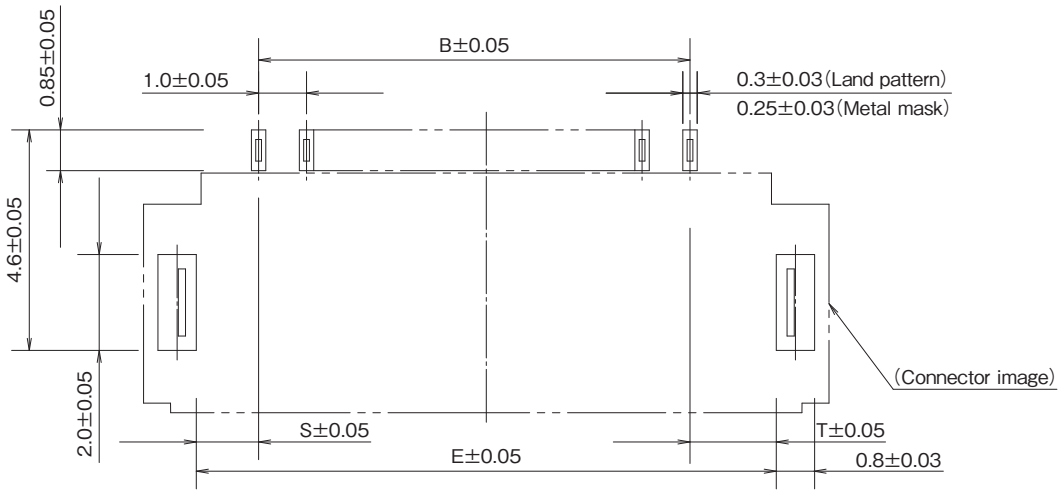
Part No.	HRS No.	No. of Pos.	B	E	F	G
FH52-6S-0.5SH(##)	CL0580-3304-0-##	6	2.5	5.1	5.1	3.5
FH52-8S-0.5SH(##)	CL0580-3305-3-##	8	3.5	6.1	6.1	4.5
FH52-10S-0.5SH(##)	CL0580-3306-6-##	10	4.5	7.1	7.1	5.5
FH52-11S-0.5SH(##)	CL0580-3320-7-##	11	5.0	7.6	7.6	6.0
FH52-12S-0.5SH(##)	CL0580-3307-9-##	12	5.5	8.1	8.1	6.5
FH52-15S-0.5SH(##)	CL0580-3302-5-##	15	7.0	9.6	9.6	8.0
FH52-18S-0.5SH(##)	CL0580-3321-0-##	18	8.5	11.1	11.1	9.5
FH52-20S-0.5SH(##)	CL0580-3309-4-##	20	9.5	12.1	12.1	10.5
FH52-22S-0.5SH(##)	CL0580-3317-2-##	22	10.5	13.1	13.1	11.5
FH52-24S-0.5SH(##)	CL0580-3318-5-##	24	11.5	14.1	14.1	12.5
FH52-25S-0.5SH(##)	CL0580-3316-0-##	25	12.0	14.6	14.6	13.0
FH52-26S-0.5SH(##)	CL0580-3319-8-##	26	12.5	15.1	15.1	13.5
FH52-28S-0.5SH(##)	CL0580-3324-8-##	28	13.5	16.1	16.1	14.5
FH52-30S-0.5SH(##)	CL0580-3310-3-##	30	14.5	17.1	17.1	15.5
FH52-32S-0.5SH(##)	CL0580-3325-0-##	32	15.5	18.1	18.1	16.5
FH52-40S-0.5SH(##)	CL0580-3300-0-##	40	19.5	22.1	22.1	20.5
FH52-42S-0.5SH(##)	CL0580-3329-1-##	42	20.5	23.1	23.1	21.5
FH52-45S-0.5SH(##)	CL0580-3311-6-##	45	22.0	24.6	24.6	23.0
FH52-50S-0.5SH(##)	CL0580-3303-8-##	50	24.5	27.1	27.1	25.5
FH52-60S-0.5SH(##)	CL0580-3301-2-##	60	29.5	32.1	32.1	30.5

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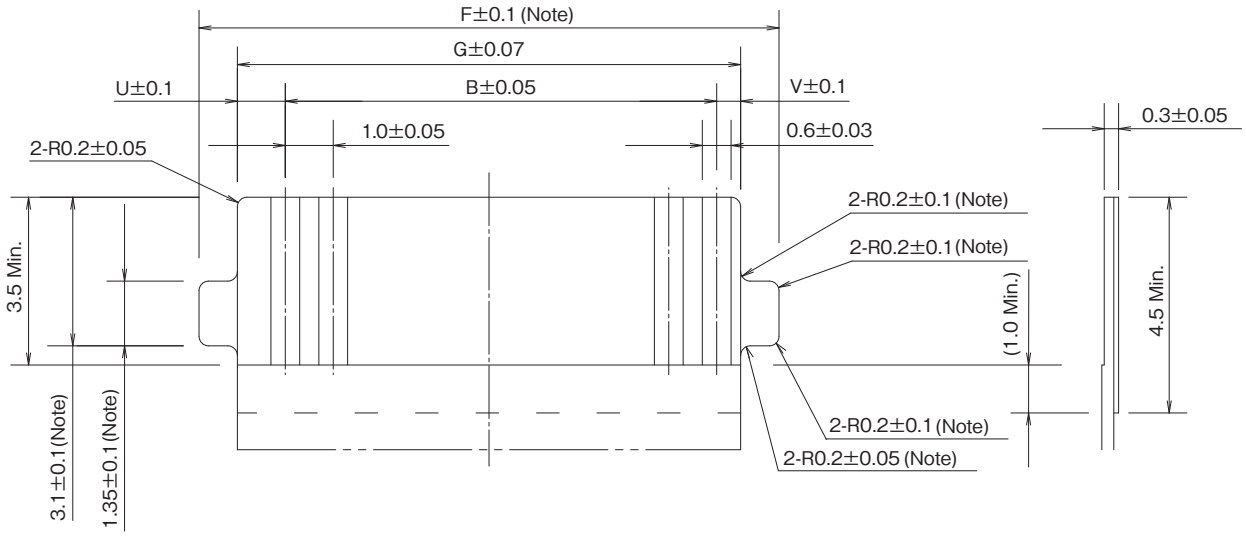
■FH52 (Standard Type) 1.0mm Pitch Product

●Recommended PCB Mounting Pattern and Metal Mask Dimensions

Recommended metal mask thickness : 0.12mm



●Recommended FPC/FFC Dimensions



Note : FPC/FFC without tabs can also be used.
When using FPC/FFC without tabs the specified dimensions are not necessary.

Unit : mm

Part No.	HRS No.	No. of Pos.	B	E	F	G	S	T	U	V
FH52-10(4)SA-1SH(##)	CL0580-3330-0-##	4	3.0	7.1	7.1	5.5	1.8	2.3	1.5	1.0
FH52-5S-1SH(##) (Note)	CL0580-3336-7-##	5	4.0	7.6	7.6	6.0	1.8	1.8	1.0	1.0
FH52-12S-1SH(##)	CL0580-3323-5-##	12	11.0	14.6	14.6	13.0	1.8	1.8	1.0	1.0
FH52-32(16)SB-1SH(##) (Note)	CL0580-3338-2-##	16	15.0	18.1	18.1	16.5	1.3	1.8	1.0	0.5
FH52-60(30)SB-1SH(##)	CL0580-3315-7-##	30	29.0	32.1	32.1	30.5	1.3	1.8	1.0	0.5

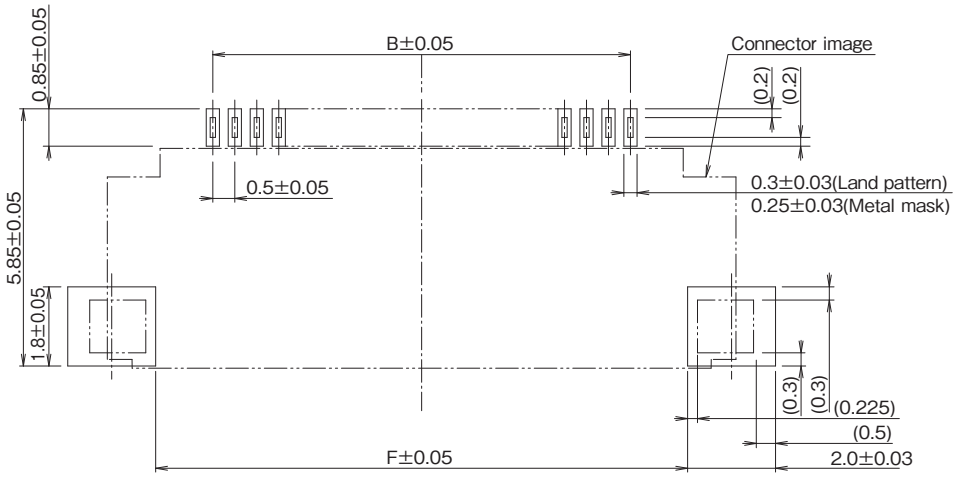
Note : The (99) specification is only available for 4, 12 and 30pos.

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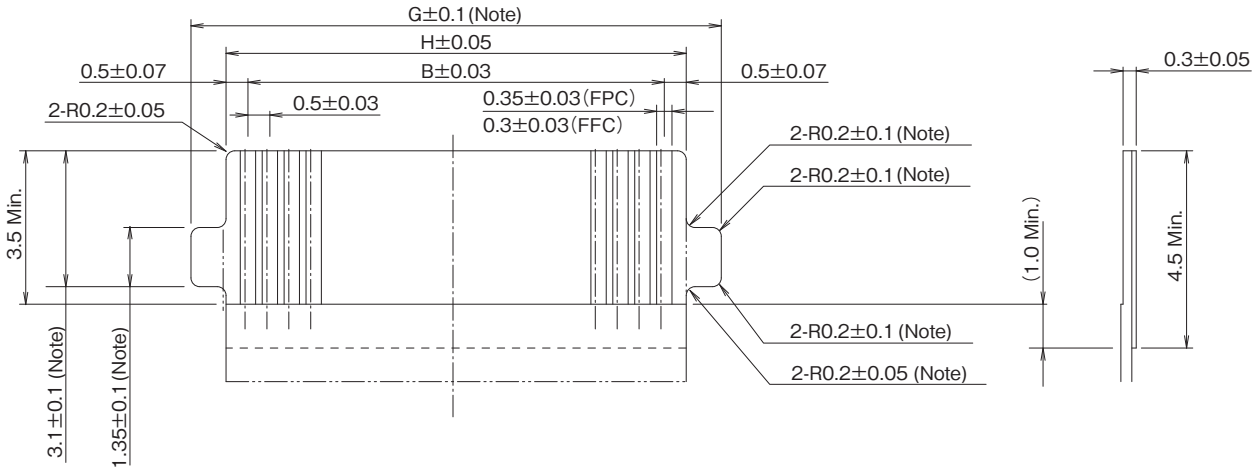
■FH52E (Long Solder Tabs Type) 0.5mm Pitch Product

●Recommended PCB Mounting Pattern and Metal Mask Dimensions

Recommended metal mask thickness : 0.12mm



●Recommended FPC/FFC Dimensions



Note : FPC/FFC without tabs can also be used.
When using FPC/FFC without tabs the specified dimensions are not necessary.

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Unit : mm

Part No.	HRS No.	No. of Pos.	B	F	G	H
FH52E-6S-0.5SH(##)	CL0580-3365-0-##	6	2.5	5.1	5.1	3.5
FH52E-8S-0.5SH(##)	CL0580-3349-0-##	8	3.5	6.1	6.1	4.5
FH52E-10S-0.5SH(##)	CL0580-3346-0-##	10	4.5	7.1	7.1	5.5
FH52E-15S-0.5SH(##)	CL0580-3337-0-##	15	7.0	9.6	9.6	8.0
FH52E-18S-0.5SH(##)	CL0580-3331-3-##	18	8.5	11.1	11.1	9.5
FH52E-20S-0.5SH(##)	CL0580-3357-0-##	20	9.5	12.1	12.1	10.5
FH52E-22S-0.5SH(##)	CL0580-3343-2-##	22	10.5	13.1	13.1	11.5
FH52E-24S-0.5SH(##)	CL0580-3340-4-##	24	11.5	14.1	14.1	12.5
FH52E-26S-0.5SH(##) (Note)	CL0580-3366-0-##	26	12.5	15.1	15.1	13.5
FH52E-30S-0.5SH(##)	CL0580-3347-3-##	30	14.5	17.1	17.1	15.5
FH52E-40S-0.5SH(##)	CL0580-3334-1-##	40	19.5	22.1	22.1	20.5
FH52E-45S-0.5SH(##)	CL0580-3368-0-##	45	22.0	24.6	24.6	23.0
FH52E-50S-0.5SH(##)	CL0580-3335-4-##	50	24.5	27.1	27.1	25.5
FH52E-60S-0.5SH(##)	CL0580-3339-5-##	60	29.5	32.1	32.1	30.5
FH52E-64S-0.5SH(##)	CL0580-3333-9-##	64	31.5	34.1	34.1	32.5
FH52E-68S-0.5SH(##)	CL0580-3332-6-##	68	33.5	36.1	36.1	34.5

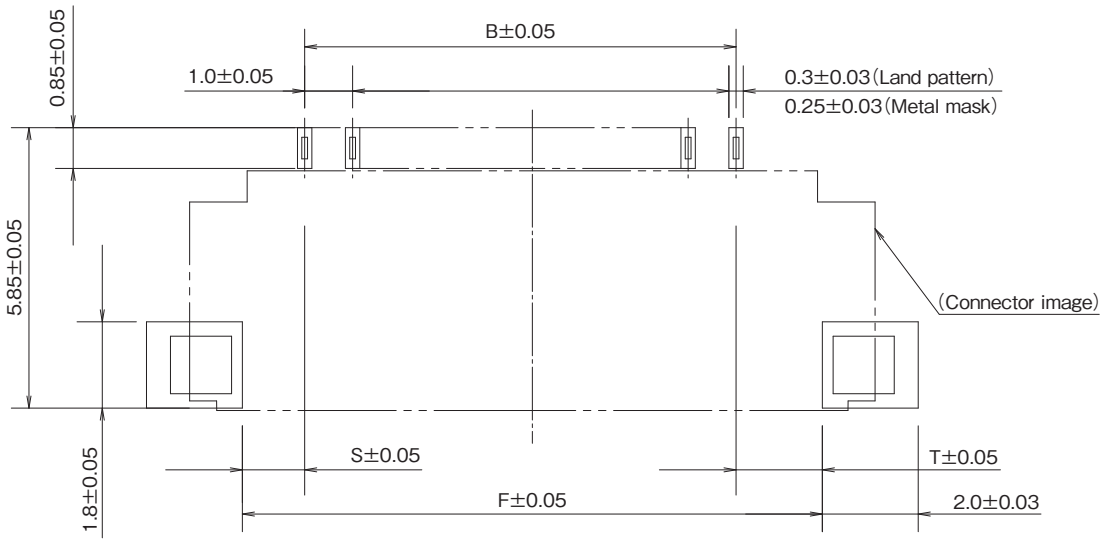
Note : The (99) specification is available for all positions except 26pos.

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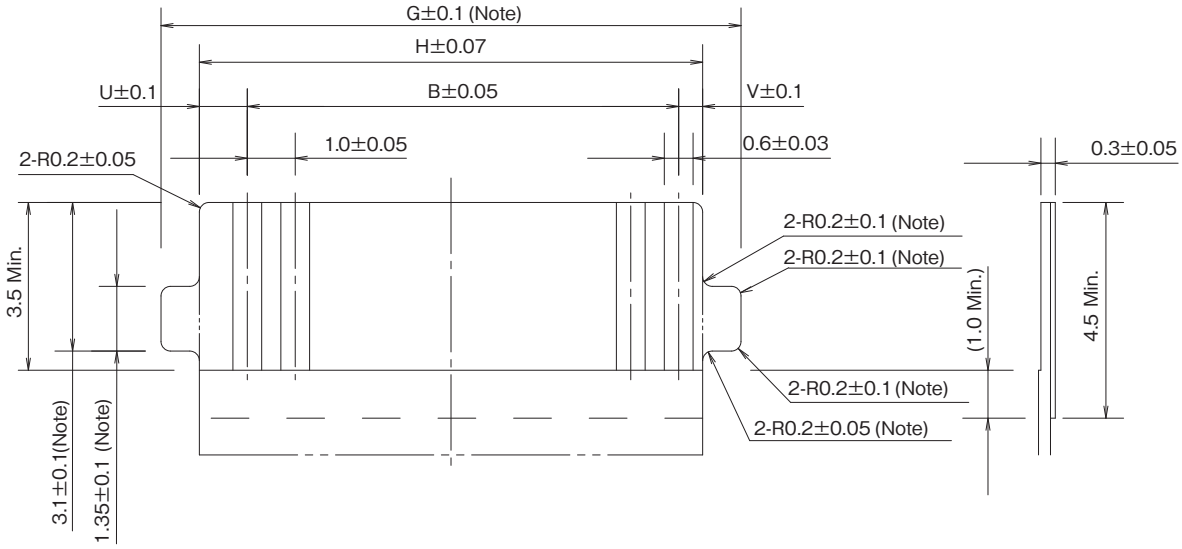
■FH52E (Long Solder Tabs Type) 1.0mm Pitch Product

●Recommended PCB Mounting Pattern and Metal Mask Dimensions

Recommended metal mask thickness : 0.12mm



●Recommended FPC/FFC Dimensions



Note : FPC/FFC without tabs can also be used.
When using FPC/FFC without tabs the specified dimensions are not necessary.

Unit : mm

Part No.	HRS No.	No. of Pos.	B	F	G	H	S	T	U	V
FH52E-8(4)SB-1SH(##)	CL0580-3351-0-##	4	3.0	6.1	6.1	4.5	1.3	1.8	1.0	0.5
FH52E-20(10)SA-1SH(##)	CL0580-3352-0-##	10	9.0	12.1	12.1	10.5	1.8	1.3	0.5	1.0
FH52E-20(10)SB-1SH(##)	CL0580-3353-0-##	10	9.0	12.1	12.1	10.5	1.3	1.8	1.0	0.5
FH52E-50(25)SA-1SH(##)	CL0580-3354-0-##	25	24.0	27.1	27.1	25.5	1.8	1.3	0.5	1.0
FH52E-50(25)SB-1SH(##)	CL0580-3355-0-##	25	24.0	27.1	27.1	25.5	1.3	1.8	1.0	0.5
FH52E-60(30)SB-1SH(##) (Note)	CL0580-3358-0-##	30	34.3	32.1	32.1	30.5	1.3	1.8	1.0	0.5

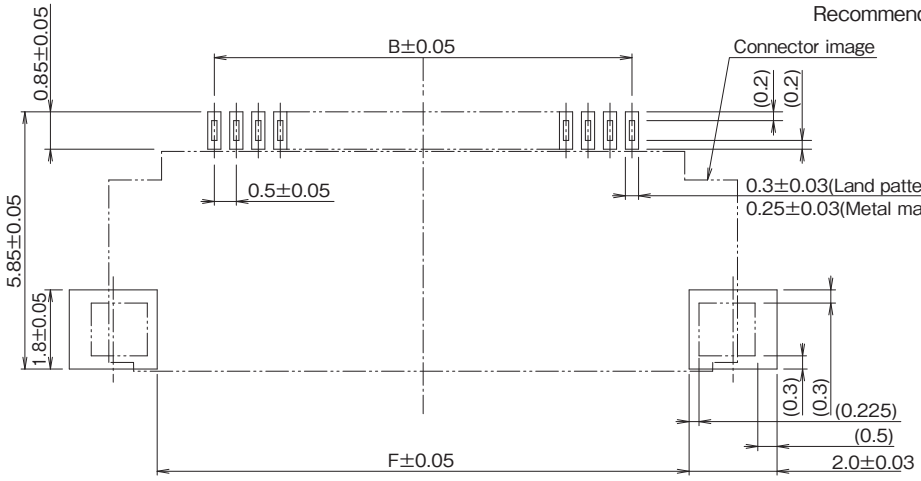
Note : The (99) specification is available for all positions except 30pos.

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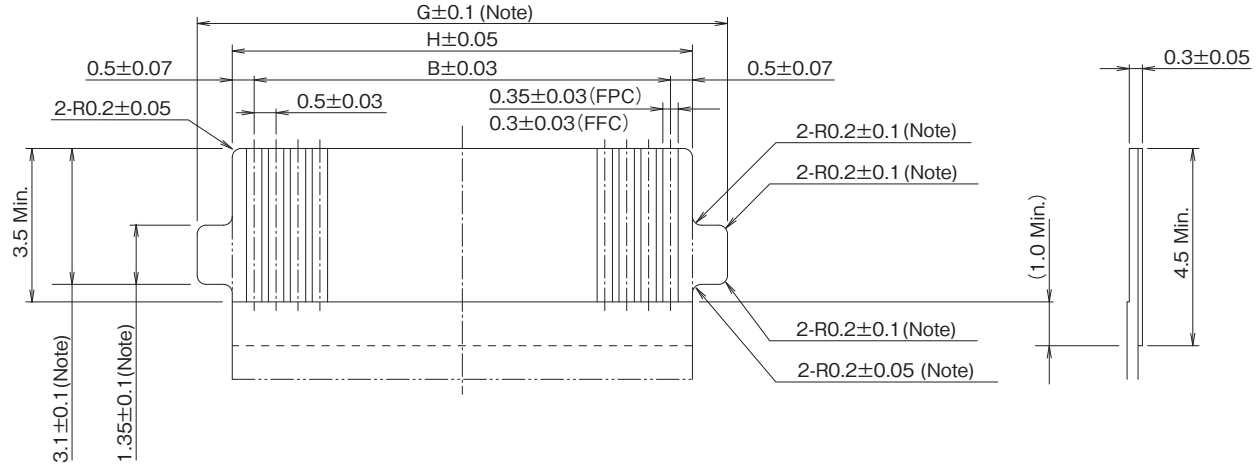
■FH52K (Long Solder Tabs, 125℃ Heat Resistant Type) 0.5mm Pitch Product

●Recommended PCB Mounting Pattern and Metal Mask Dimensions

Recommended metal mask thickness : 0.12mm



●Recommended FPC/FFC Dimensions



Note : FPC/FFC without tabs can also be used.
When using FPC/FFC without tabs the specified dimensions are not necessary.

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Unit : mm

Part No.	HRS No.	No. of Pos.	B	F	G	H
FH52K-6S-0.5SH(##)	CL0580-4613-0-##	6	2.5	5.1	5.1	3.5
FH52K-8S-0.5SH(##)	CL0580-4611-0-##	8	3.5	6.1	6.1	4.5
FH52K-10S-0.5SH(##)	CL0580-4606-0-##	10	4.5	7.1	7.1	5.5
FH52K-12S-0.5SH(##)	CL0580-4629-0-##	12	5.5	8.1	8.1	6.5
FH52K-15S-0.5SH(##)	CL0580-4617-0-##	15	7.0	9.6	9.6	8.0
FH52K-18S-0.5SH(##)	CL0580-4636-0-##	18	8.5	11.1	11.1	9.5
FH52K-20S-0.5SH(##)	CL0580-4604-0-##	20	9.5	12.1	12.1	10.5
FH52K-22S-0.5SH(##)	CL0580-4632-0-##	22	10.5	13.1	13.1	11.5
FH52K-24S-0.5SH(##)	CL0580-4633-0-##	24	11.5	14.1	14.1	12.5
FH52K-25S-0.5SH(##)	CL0580-4634-0-##	25	12.0	14.6	14.6	13.0
FH52K-26S-0.5SH(##)	CL0580-4635-0-##	26	12.5	15.1	15.1	13.5
FH52K-30S-0.5SH(##)	CL0580-4631-0-##	30	14.5	17.1	17.1	15.5
FH52K-32S-0.5SH(##)	CL0580-4600-9-##	32	15.5	18.1	18.1	16.5
FH52K-34S-0.5SH(##)	CL0580-4601-0-##	34	16.5	19.1	19.1	17.5
FH52K-40S-0.5SH(##)	CL0580-4620-0-##	40	19.5	22.1	22.1	20.5
FH52K-45S-0.5SH(##)	CL0580-4637-0-##	45	22.0	24.6	24.6	23.0
FH52K-50S-0.5SH(##)	CL0580-4609-0-##	50	24.5	27.1	27.1	25.5
FH52K-60S-0.5SH(##)	CL0580-4607-0-##	60	29.5	32.1	32.1	30.5
FH52K-68S-0.5SH(##)	CL0580-4614-0-##	68	33.5	36.1	36.1	34.5
FH52K-80S-0.5SH(05) (Note)	CL0580-4641-0-05	80	39.5	42.1	42.1	40.5

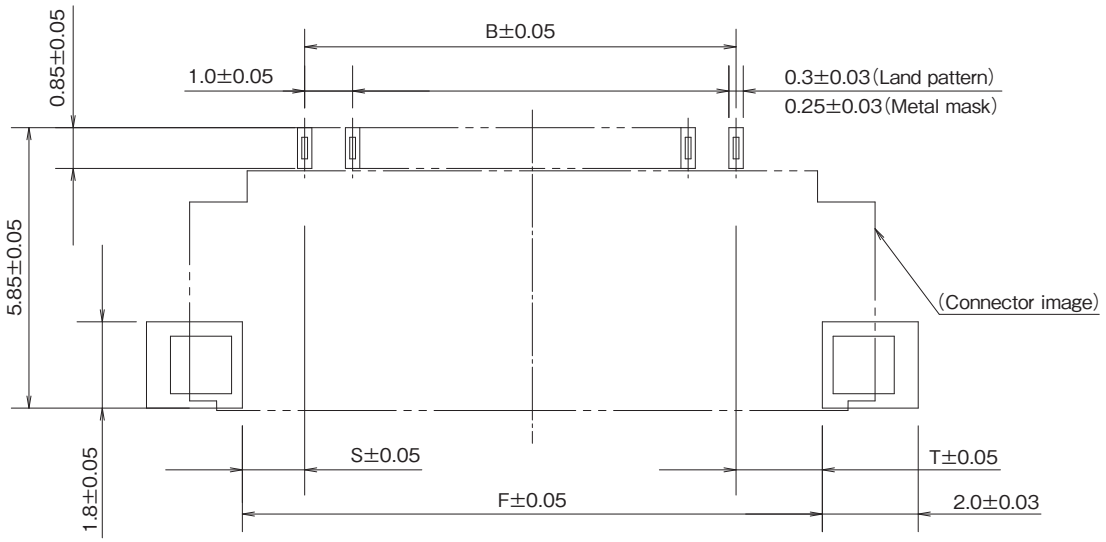
Note : The (05) specification is available for 80pos. only. The purchase unit is 2,000pcs per reel for specification (05) of FH52K-80S-0.5SH.

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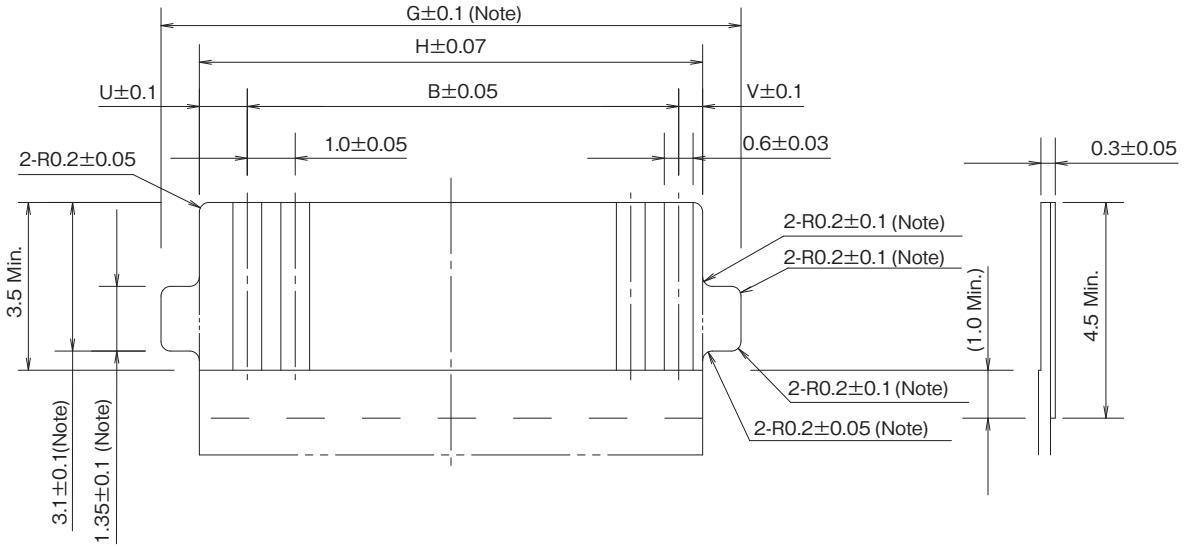
■FH52K (Long Solder Tabs, 125℃ Heat Resistant Type) 1.0mm Pitch Product

●Recommended PCB Mounting Pattern and Metal Mask Dimensions

Recommended metal mask thickness : 0.12mm



●Recommended FPC/FFC Dimensions



Note : FPC/FFC without tabs can also be used.
When using FPC/FFC without tabs the specified dimensions are not necessary.

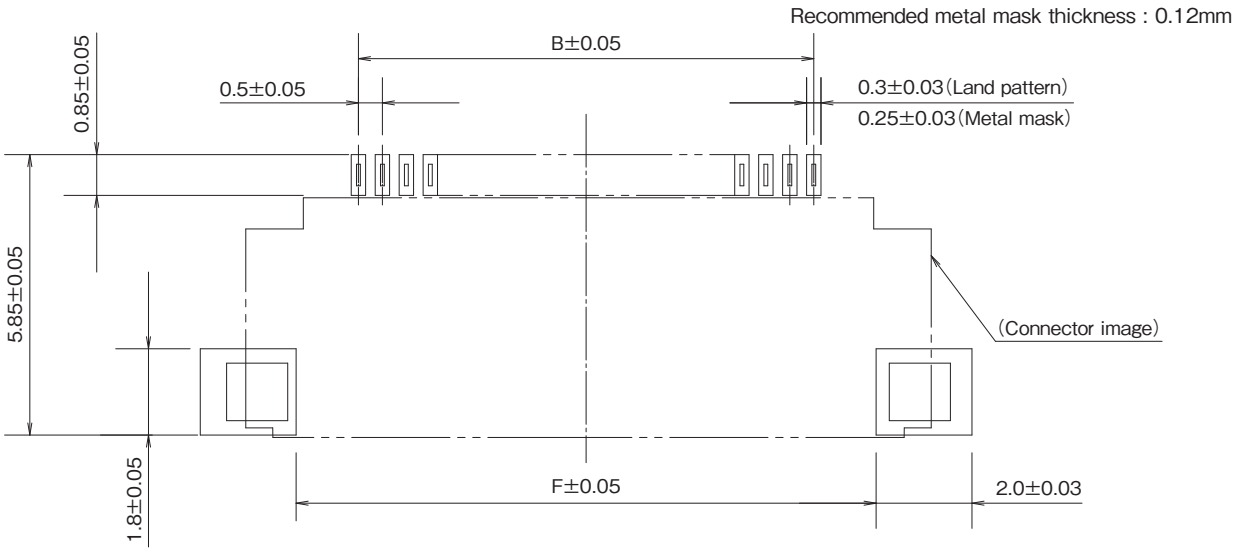
Unit : mm

Part No.	HRS No.	No. of Pos.	B	F	G	H	S	T	U	V
FH52K-12(6)SA-1SH(##)	CL0580-4638-0-##	6	5.0	8.1	8.1	6.5	1.8	1.3	0.5	1.0
FH52K-20(10)SB-1SH(##)	CL0580-4630-0-##	10	9.0	12.1	12.1	10.5	1.3	1.8	1.0	0.5

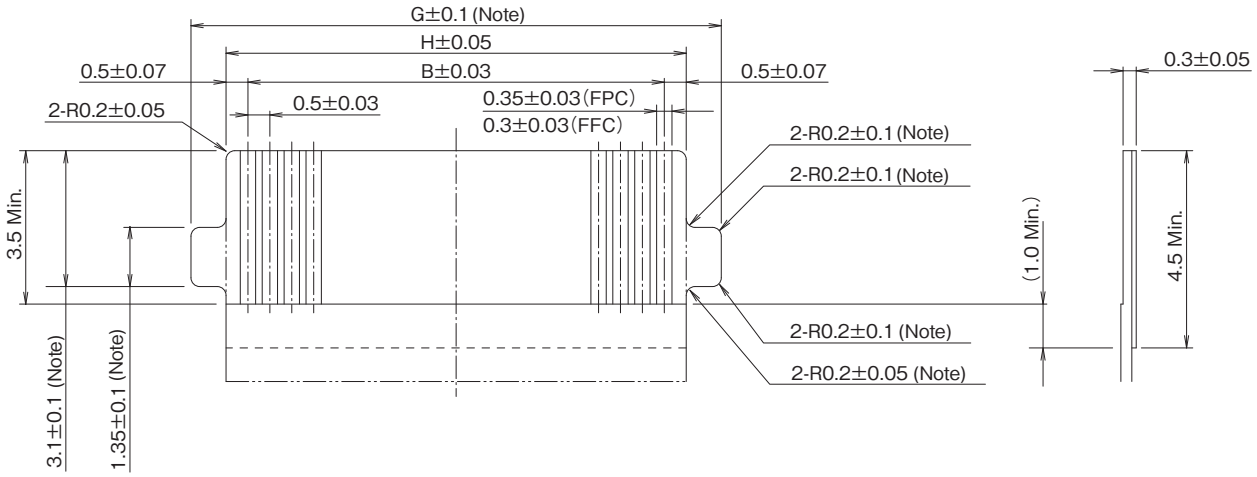
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■FH52T (Long Solder Tabs, 2-Point Contact Type) 0.5mm Pitch Product

●Recommended PCB Mounting Pattern and Metal Mask Dimensions



●Recommended FPC/FFC Dimensions



Note : FPC/FFC without tabs can also be used.
When using FPC/FFC without tabs the specified dimensions are not necessary.

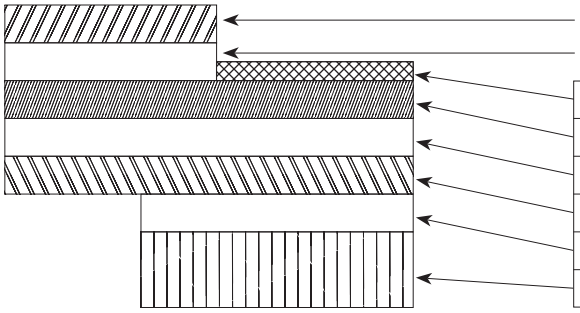
Unit : mm

Part No.	HRS No.	No. of Pos.	B	F	G	H
FH52T-10S-0.5SH(##)	CL0580-4503-0-##	10	4.5	7.1	7.1	5.5
FH52T-24S-0.5SH(##)	CL0580-4500-0-##	24	11.5	14.1	14.1	12.5
FH52T-32S-0.5SH(##)	CL0580-4502-0-##	32	15.5	18.1	18.1	16.5
FH52T-50S-0.5SH(##)	CL0580-4501-7-##	50	24.5	27.1	27.1	25.5

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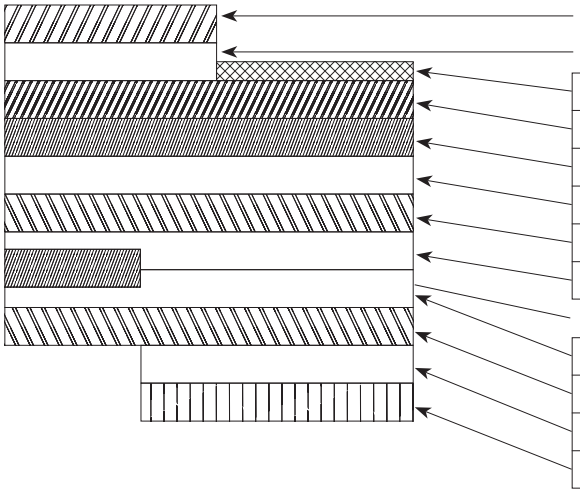
FPC/FFC Construction (Recommended Specifications)

1. 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

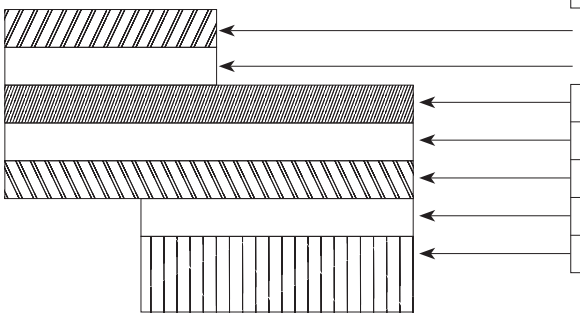
2. Double-Sided FPC (FPC : Flexible Printed Circuit)



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

Note : Use of double-sided FPC with copper foil is not recommended in order to prevent release of the FPC due to bending.

3. FFC (FFC : Flexible Flat Cable)



Material Name	Material	Thickness (μm)
Polyester Film		(12)
Adhesive	Thermoplastic Polyester	(30)
Gold Plated Annealed Copper Foil with Nickel Underplating		35
Adhesive	Polyester	30
Polyester		12
Adhesive	Polyester	30
Stiffener	Polyester	188
	Total	295

Note : Typical thickness tolerance is about ± 20 μm

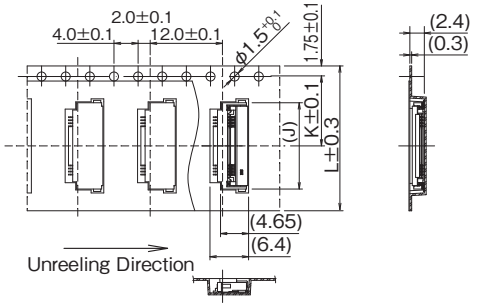
4. Precautions

1. This is a reference FPC/FFC construction. Make the thickness of the FPC/FFC mated portion 0.30 ± 0.05mm in reference to the FPC/FFC construction.
2. Contact an FPC/FFC maker for details on component construction.

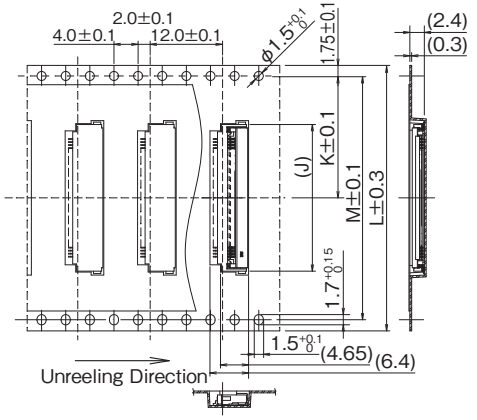
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Packaging Specification

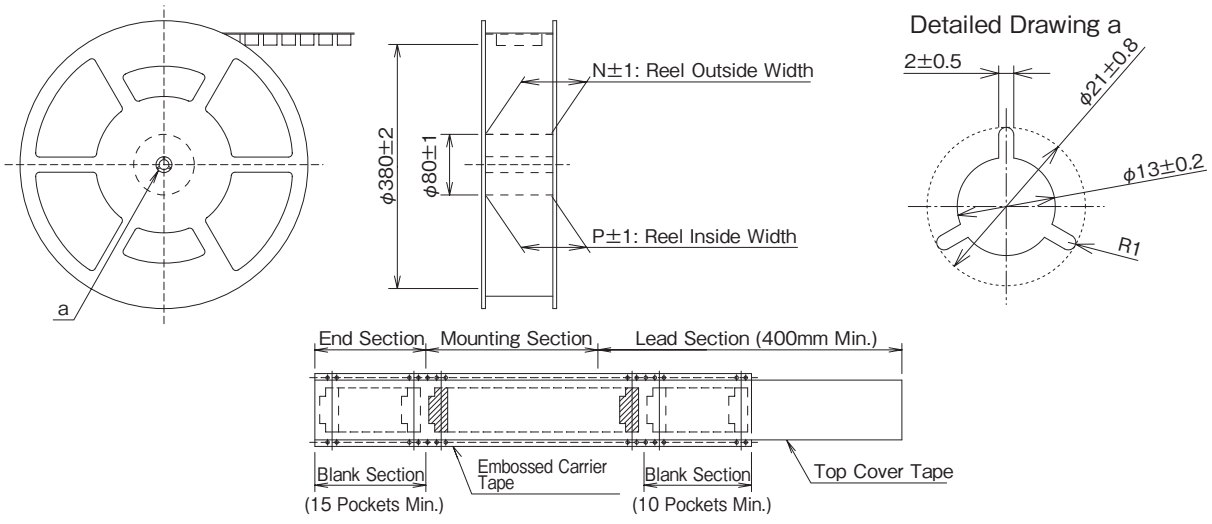
●Embossed Carrier Tape Dimensions (Tape Width 24mm Max.)



●Embossed Carrier Tape Dimensions (Tape Width 32mm Min.)



●Reel Dimensions



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FH52 (Standard Type) 0.5mm Pitch Product

Unit : mm

Part No.	HRS No.	No. of Pos.	J	K	L	M	N	P
FH52-6S-0.5SH(##)	CL0580-3304-0-##	6	7.6	11.5	24.0	-	29.4	25.4
FH52-8S-0.5SH(##)	CL0580-3305-3-##	8	8.6					
FH52-10S-0.5SH(##)	CL0580-3306-6-##	10	9.6					
FH52-11S-0.5SH(##)	CL0580-3320-7-##	11	10.1					
FH52-12S-0.5SH(##)	CL0580-3307-9-##	12	10.6					
FH52-15S-0.5SH(##)	CL0580-3302-5-##	15	12.1					
FH52-18S-0.5SH(##)	CL0580-3321-0-##	18	13.6					
FH52-20S-0.5SH(##)	CL0580-3309-4-##	20	14.6					
FH52-22S-0.5SH(##)	CL0580-3317-2-##	22	15.6	14.2	32.0	28.4	37.4	33.4
FH52-24S-0.5SH(##)	CL0580-3318-5-##	24	16.6					
FH52-25S-0.5SH(##)	CL0580-3316-0-##	25	17.1					
FH52-26S-0.5SH(##)	CL0580-3319-8-##	26	17.6					
FH52-28S-0.5SH(##)	CL0580-3324-8-##	28	18.6					
FH52-30S-0.5SH(##)	CL0580-3310-3-##	30	19.6					
FH52-32S-0.5SH(##)	CL0580-3325-0-##	32	20.6	20.2	44.0	40.4	49.4	45.4
FH52-40S-0.5SH(##)	CL0580-3300-0-##	40	24.6					
FH52-42S-0.5SH(##)	CL0580-3329-1-##	42	25.6					
FH52-45S-0.5SH(##)	CL0580-3311-6-##	45	27.1					
FH52-50S-0.5SH(##)	CL0580-3303-8-##	50	29.6					
FH52-60S-0.5SH(##)	CL0580-3301-2-##	60	34.6	26.2	56.0	52.4	61.4	57.4

FH52 (Standard Type) 1.0mm Pitch Product

Unit : mm

Part No.	HRS No.	No. of Pos.	J	K	L	M	N	P
FH52-10(4)SA-1SH(##)	CL0580-3330-0-##	4	9.6	11.5	24.0	-	29.4	25.4
FH52-5S-1SH(##) (Note)	CL0580-3336-7-##	5	10.1	11.5	24.0		29.4	25.4
FH52-12S-1SH(##)	CL0580-3323-5-##	12	17.1	14.2	32.0	28.4	37.4	33.4
FH52-32(16)SB-1SH(##) (Note)	CL0580-3338-2-##	16	20.6	20.2	44.0	40.4	49.4	45.4
FH52-60(30)SB-1SH(##)	CL0580-3315-7-##	30	34.6	26.2	56.0	52.4	61.4	57.4

Note : The (99) specification is only available for 4, 12 and 30pos.

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FH52E (Long Solder Tabs Type) 0.5mm Pitch Product

Unit : mm

Part No.	HRS No.	No. of Pos.	J	K	L	M	N	P
FH52E-6S-0.5SH(##)	CL0580-3365-0-##	6	7.6	11.5	24.0	-	29.4	25.4
FH52E-8S-0.5SH(##)	CL0580-3349-0-##	8	8.6					
FH52E-10S-0.5SH(##)	CL0580-3346-0-##	10	9.6					
FH52E-15S-0.5SH(##)	CL0580-3337-0-##	15	12.1					
FH52E-18S-0.5SH(##)	CL0580-3331-3-##	18	13.6					
FH52E-20S-0.5SH(##)	CL0580-3357-0-##	20	14.6					
FH52E-22S-0.5SH(##)	CL0580-3343-2-##	22	15.6	14.2	32.0	28.4	37.4	33.4
FH52E-24S-0.5SH(##)	CL0580-3340-4-##	24	16.6					
FH52E-26S-0.5SH(##) (Note)	CL0580-3366-0-##	26	17.6					
FH52E-30S-0.5SH(##)	CL0580-3347-3-##	30	19.6	20.2	44.0	40.4	49.4	45.4
FH52E-40S-0.5SH(##)	CL0580-3334-1-##	40	24.6					
FH52E-45S-0.5SH(##)	CL0580-3368-0-##	45	27.1					
FH52E-50S-0.5SH(##)	CL0580-3335-4-##	50	29.6					
FH52E-60S-0.5SH(##)	CL0580-3339-5-##	60	34.6	26.2	56.0	52.4	61.4	57.4
FH52E-64S-0.5SH(##)	CL0580-3333-9-##	64	36.6					
FH52E-68S-0.5SH(##)	CL0580-3332-6-##	68	38.6					

Note : The (99) specification is available for all positions except 26pos.

FH52E (Long Solder Tabs Type) 1.0mm Pitch Product

Unit : mm

Part No.	HRS No.	No. of Pos.	J	K	L	M	N	P
FH52E-8(4)SB-1SH(##)	CL0580-3351-0-##	4	8.6	11.5	24.0	-	29.4	25.4
FH52E-20(10)SA-1SH(##)	CL0580-3352-0-##	10	14.6					
FH52E-20(10)SB-1SH(##)	CL0580-3353-0-##	10	14.6					
FH52E-50(25)SA-1SH(##)	CL0580-3354-0-##	25	29.6	20.2	44.0	40.4	49.4	45.4
FH52E-50(25)SB-1SH(##)	CL0580-3355-0-##	25	29.6					
FH52E-60(30)SB-1SH(##) (Note)	CL0580-3358-0-##	30	34.6	26.2	56.0	52.4	61.4	57.4

Note : The (99) specification is available for all positions except 30pos.

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FH52K (Long Solder Tabs, 125℃ Heat Resistant Type) 0.5mm Pitch Product

Unit : mm

Part No.	HRS No.	No. of Pos.	J	K	L	M	N	P
FH52K-6S-0.5SH(##)	CL0580-4613-0-##	6	7.6	11.5	24.0	-	29.4	25.4
FH52K-8S-0.5SH(##)	CL0580-4611-0-##	8	8.6					
FH52K-10S-0.5SH(##)	CL0580-4606-0-##	10	9.6					
FH52K-12S-0.5SH(##)	CL0580-4629-0-##	12	10.6					
FH52K-15S-0.5SH(##)	CL0580-4617-0-##	15	12.1					
FH52K-18S-0.5SH(##)	CL0580-4636-0-##	18	13.6					
FH52K-20S-0.5SH(##)	CL0580-4604-0-##	20	14.6					
FH52K-22S-0.5SH(##)	CL0580-4632-0-##	22	15.6	14.2	32.0	28.4	37.4	33.4
FH52K-24S-0.5SH(##)	CL0580-4633-0-##	24	16.6					
FH52K-25S-0.5SH(##)	CL0580-4634-0-##	25	17.1					
FH52K-26S-0.5SH(##)	CL0580-4635-0-##	26	17.6					
FH52K-30S-0.5SH(##)	CL0580-4631-0-##	30	19.6	20.2	44.0	40.4	49.4	45.4
FH52K-32S-0.5SH(##)	CL0580-4600-9-##	32	20.6					
FH52K-34S-0.5SH(##)	CL0580-4601-0-##	34	21.6					
FH52K-40S-0.5SH(##)	CL0580-4620-0-##	40	24.6					
FH52K-45S-0.5SH(##)	CL0580-4637-0-##	45	27.1					
FH52K-50S-0.5SH(##)	CL0580-4609-0-##	50	29.6					
FH52K-60S-0.5SH(##)	CL0580-4607-0-##	60	34.6	26.2	56.0	52.4	61.4	57.4
FH52K-68S-0.5SH(##)	CL0580-4614-0-##	68	38.6					
FH52K-80S-0.5SH(05) (Note)	CL0580-4641-0-05	80	44.6	34.2±0.3	72.0+0.4/-0.3	68.4	77.4	73.4

Note : The (05) specification is available for 80pos. only. The purchase unit is 2,000pcs per reel for specification (05) of FH52K-80S-0.5SH.

FH52K (Long Solder Tabs, 125℃ Heat Resistant Type) 1.0mm Pitch Product

Unit : mm

Part No.	HRS No.	No. of Pos.	J	K	L	M	N	P
FH52K-12(6)SA-1SH(##)	CL0580-4638-0-##	6	10.6	11.5	24.0	-	29.4	25.4
FH52K-20(10)SB-1SH(##)	CL0580-4630-0-##	10	14.6			-		

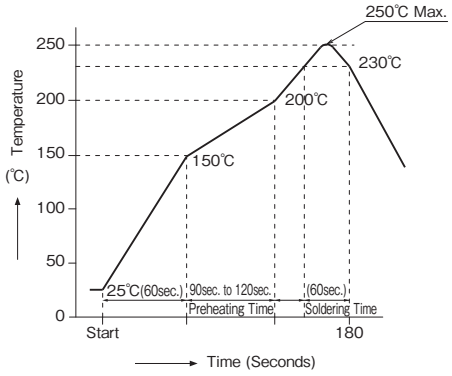
FH52T (Long Solder Tabs, 2-Point Contact Type) 0.5mm Pitch Product

Unit : mm

Part No.	HRS No.	No. of Pos.	J	K	L	M	N	P
FH52T-10S-0.5SH(##)	CL0580-4503-0-##	10	9.6	11.5	24.0	-	29.4	25.4
FH52T-24S-0.5SH(##)	CL0580-4500-0-##	24	16.6	14.2	32.0	28.4	37.4	33.4
FH52T-32S-0.5SH(##)	CL0580-4502-0-##	32	20.6	20.2	44.0	40.4	49.4	45.4
FH52T-50S-0.5SH(##)	CL0580-4501-7-##	50	29.6	26.2	56.0	52.4	61.4	57.4

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Recommended Temperature Profile



Applicable Conditions

Solder Method :	Reflow, IR
Environment :	Room air
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

This temperature profile is for the above applicable conditions.
The temperature profile may vary depending on the type of cream solder, the manufacturer, the board size, and other conditions such as mounting materials. Please check the mounting status before use.

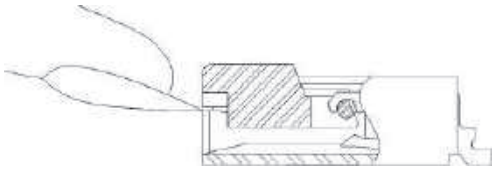
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Operation and Precautions

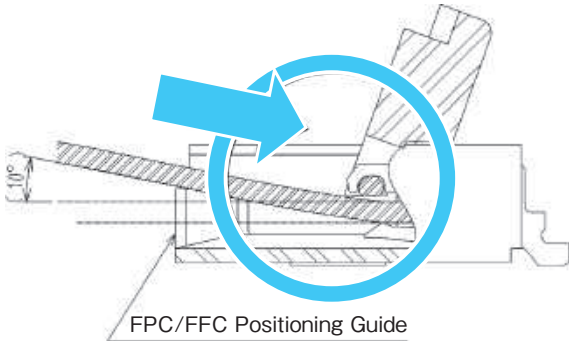
[Operation]

1. FPC/FFC Insertion

①Lift the actuator upward. (Lock release)
You can easily pop it up with the thumbnail or index-finger nail.

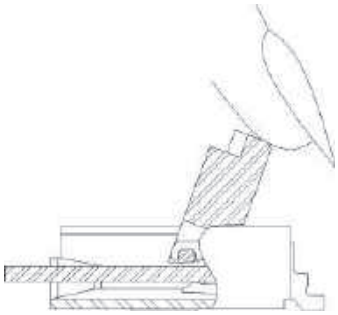


②Insert the FPC or FFC with the exposed conductive traces facing down.
When connecting a tabbed FPC/FFC, ensure that the FPC/FFC is inserted at an angle of approximately 10° with respect to the board surface and perpendicular to the connector.



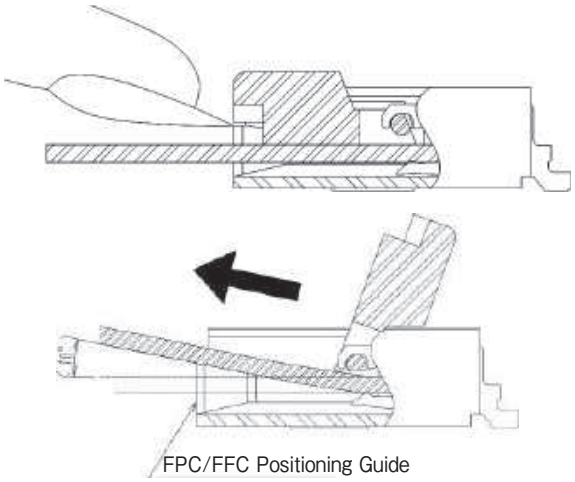
FPC/FFC Positioning Guide

③Rotate down the actuator until firmly closed.



2. FPC/FFC removal

①Lift the actuator upward. After the lock has been released slightly lift up the FPC/FFC and pull it out.

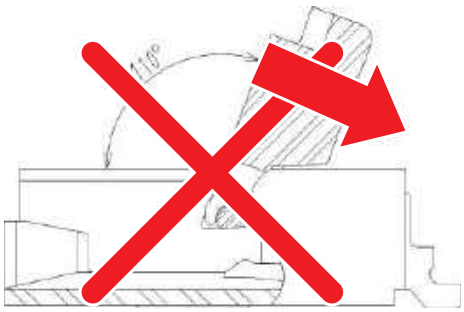


FPC/FFC Positioning Guide

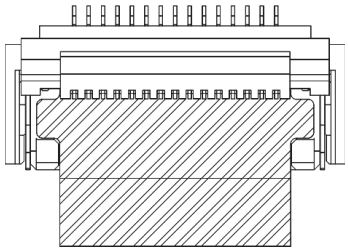
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[Precautions]

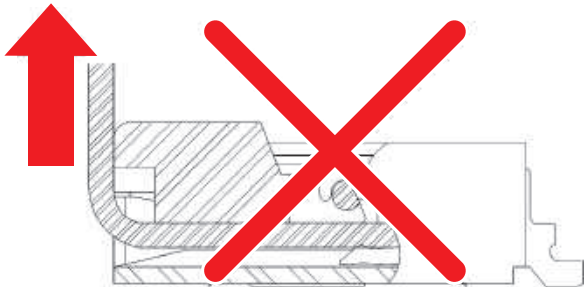
①The FH52 Series actuator does not rotate open beyond 110°. Do not apply a force to open it beyond this point. The actuator may come off or be permanently damaged.



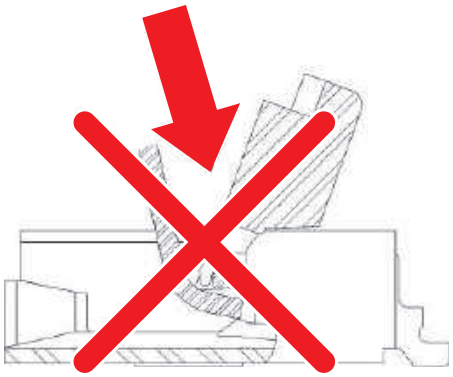
②Insert the FPC or FFC properly to the opening of the connector.
Improper insertion may lead to a break or poor continuity of the FPC or FFC.



③The connector does not have a strong upward tensile strength due to its design.
Secure the FPC or FFC when it is subjected to a tensile force.



④When 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.

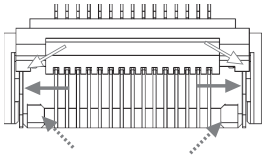


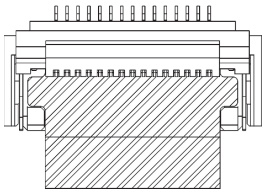
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Precautions when Mating/Unmating FPC/FFC with Tabs for Positioning Guidance

[How to insert]

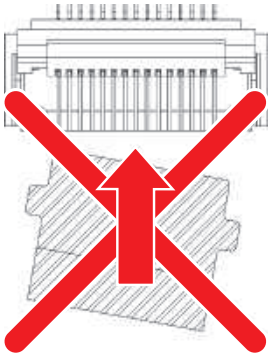
Insert the cable so that the tabs align in the interspace (⋯▶) between the mold walls on both ends of the cable insertion port and the guide walls (⟶) on the insides of both sides of the connector.



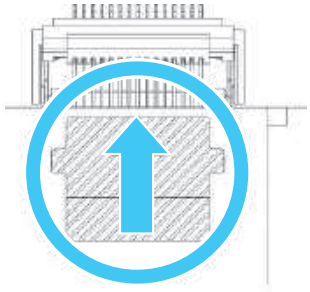


[Precautions when mating/ un-mating]

①Avoid insertion in diagonal direction.
Do not insert the cable in diagonal direction.
The corner of the cable may touch the contact, resulting in contact deformation.



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



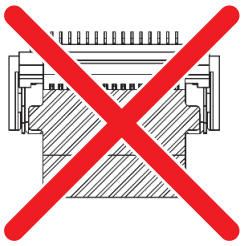
Perpendicular to the Connector

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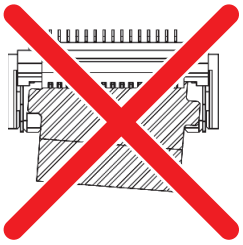
②Avoid Overlap

Avoid inserting the cables in way that it overlaps the guides on either side. Do not close the actuator with the cables overlapped on the guides as it may result in conduction failure.

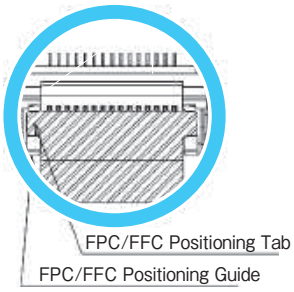
Overlap on Both Guides



Overlap on Right Guide



Correct Insertion



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While Taking into Consideration

Specifications mentioned in this catalog are reference values.
When considering to order or use this product, please review the Drawing and Product Specifications sheets.
Use an appropriate cable when using the connector in combination with cables.
If considering usage of a non-specified cable, please contact your sales representative.
If assembly process is done by jigs & tools which are not identified by Hirose, the warranty of the product may be affected.
If considering usage for below mentioned applications, please contact your sales representative.
In cases where the application will demand a high level of reliability, such as automotive, medical instruments, public infrastructure, aerospace/defense etc. Hirose must review before assurance of reliability can be given.

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