

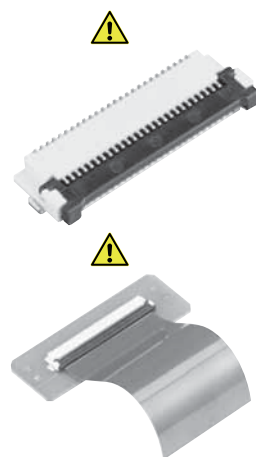
 Discontinued as of August 31, 2012

**Panasonic**  
ideas for life

For FPC/FFC

**FPC connectors  
(0.5mm pitch)  
Front lock**

**Y5F** Series

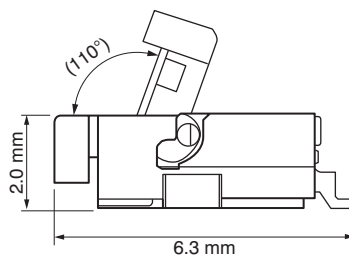


 Products are discontinued.

## FEATURES

### 1. A wide variety of digital equipments

The 0.5mm pitch, 2.0mm height, and 6.3mm depth are suitable for a variety of digital equipment.



### 2. Front lock structure with tactile feedback

The front lock structure facilitates FPC connection work.

### 3. Equipped with soldering terminals for higher mounting strength

## APPLICATIONS

Digital equipment, such as PCs, digital TVs, HDDs, car navigation systems, home-use game machines, multifunction fax machines, and security cameras

## ORDERING INFORMATION

AYF 

5	2
---	---

--	--

1	5
---	---

52: FPC Connector 0.5 mm pitch  
(Front lock)

Number of contacts (2 digits)

Contact direction  
1: Bottom contact

Surface treatment (Contact portion / Terminal portion)  
5: Au plating/Au flash plating

## PRODUCT TYPES

Height	Number of contacts	Part number	Packing	
			Inner carton	Outer carton
2.0 mm	26	AYF522615	2,000 pieces	4,000 pieces
	28	AYF522815		
	34	AYF523415		
	40	AYF524015		
	45	AYF524515		
	50	AYF525015		
	54	AYF525415		

Note: Order unit;

For mass production: in 1-inner carton (1-reel) units

Samples for mounting check: in 50-connector units.

Samples: Small lot orders are possible. Please contact our sales office.

# SPECIFICATIONS

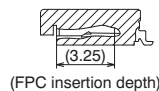
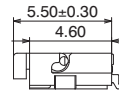
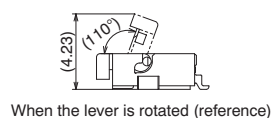
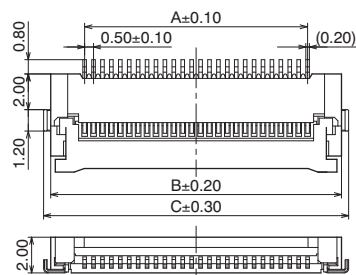
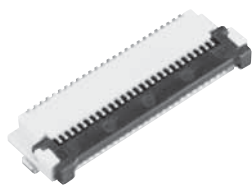
## 1. Characteristics

Item		Specifications	Conditions
Electrical characteristics	Rated current	0.5A/contact	
	Rated voltage	50V AC/DC	
	Insulation resistance	Min. 1,000MΩ (initial)	Using 250V DC megger
	Breakdown voltage	250V AC for 1 min.	No short-circuiting or damage at a detection current of 1 mA when the specified voltage is applied for one minute.
	Contact resistance	Max. 45mΩ	Measurement using HP4338B based on the measurement method specified by JIS C 5402.
Mechanical characteristics	FPC/FFC holding force	Min. 0.2N/contacts × contacts (initial)	Measurement of the maximum force applied until the inserted compatible FPC is pulled out in the insertion axis direction while the connector lever is closed
	Contact holding force	Min. 1.0N/contacts	Measuring the maximum force. As the contact is axially pull out.
	Soldering terminal holding force	Min. 1.0N/contacts	Measuring the maximum force. As the soldering terminal is axially pull out.
Environmental characteristics	Ambient temperature	−55°C to +85°C	No freezing at low temperatures. No dew condensation.
	Storage temperature	−55°C to +85°C (product only) −40°C to +50°C (emboss packing)	
	Thermal shock resistance (with FPC/FFC inserted)	5 cycles, contact resistance max. 45mΩ	Sequence 1. −40°C, 30 minutes 2. Normal temperature (+20 to 35°C), 5 to 15 minutes 3. +85°C, 30 minutes 4. Normal temperature (+20 to 35°C), 5 to 15 minutes
	Humidity resistance (with FPC/FFC inserted)	120 hours, insulation resistance min. 500MΩ, contact resistance max. 45mΩ	Bath temperature 40±2°C, humidity 90 to 95% R.H.
	Saltwater spray resistance (with FPC/FFC inserted)	24 hours, contact resistance max. 45mΩ	Bath temperature 35±2°C, saltwater concentration 5±1%
	H <sub>2</sub> S resistance (with FPC/FFC inserted)	48 hours, contact resistance max. 45mΩ	Bath temperature 40±2°C, gas concentration 3±1 ppm, humidity 75% R.H.
	Soldering heat resistance	Peak temperature: 260°C or less 300°C within 5 sec. 350°C within 3 sec.	Reflow soldering Soldering iron
Lifetime characteristics	Insertion and removal life	30 times	Repeated insertion and removal: min. 10 sec./time
Unit weight		50-contact type: 0.51 g	

## 2. Material and surface treatment

Part name	Material	Surface treatment
Molded portion	Housing: LCP resin Lever: Polyamide resin	—
Contact	Copper alloy	Contact portion; Base: Ni plating, Surface: Au plating Terminal portion; Base: Ni plating, Surface: Au plating
Soldering terminal portion	Copper alloy	Base: Ni plating, Surface: Sn plating

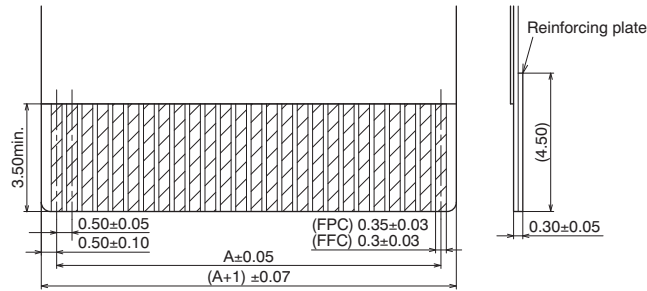
## DIMENSIONS (Unit: mm)



Number of contacts/ dimension	A	B	C
26	12.5	16.3	17.1
28	13.5	17.3	18.1
34	16.5	20.3	21.1
40	19.5	23.3	24.1
45	22.0	25.8	26.6
50	24.5	28.3	29.1
54	26.5	30.3	31.1

## RECOMMENDED FPC/FFC DIMENSIONS

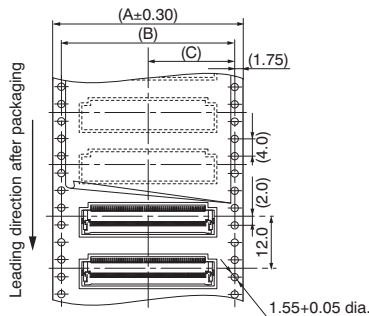
Surface finish: Au plating



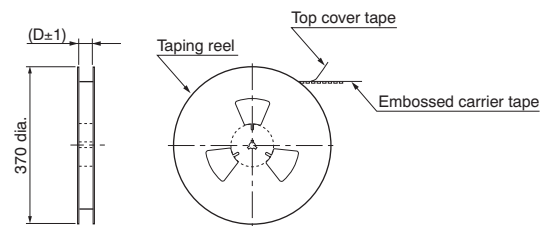
Number of contacts/ dimension	A
26	12.5
28	13.5
34	16.5
40	19.5
45	22.0
50	24.5
54	26.5

## EMBOSSED TAPE DIMENSIONS (Unit: mm) (Common for respective contact type)

### • Specifications for taping



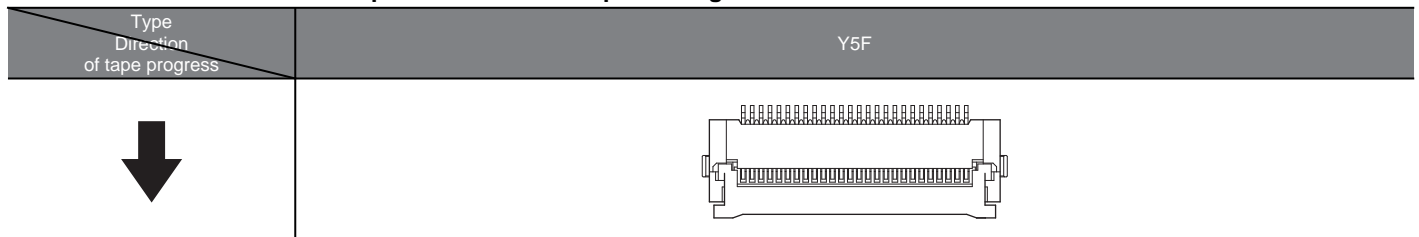
### • Specifications for reel



### • Dimension table (Unit: mm)

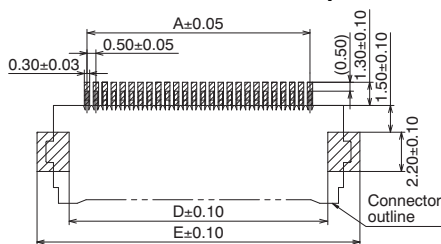
Number of contacts	A	B	C	D	Quantity per reel
26, 28 and 34 contacts	32.0	28.4	14.2	33.0	2,000
40, 45, 50 and 54 contacts	44.0	40.4	20.2	45.0	2,000

### • Connector orientation with respect to embossed tape feeding direction



## NOTES

### 1. Recommended PC board pattern



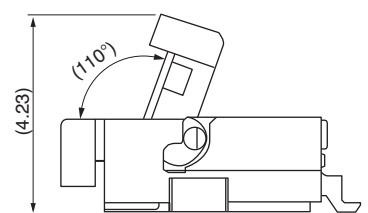
Number of contacts/ dimension	A	D	E
26	12.5	14.5	18.1
28	13.5	15.5	19.1
34	16.5	18.5	22.1
40	19.5	21.5	25.1
45	22.0	24.0	27.6
50	24.5	26.5	30.1
54	26.5	28.5	32.1

### 2. Precautions for insertion/removal of FPC/FFC

When the connector has 40 or more contacts, press both ends of the lever with two fingers to lock the lever. If only the center of the lever is pressed, a lock failure may occur, leading to a continuity failure or connector breakage.

When the connector has less than 40 contacts, open/close the lever at its center. A load applied to the lever unevenly or on only one side may deform the lever.

Fully open the lever to insert an FPC. Don't further apply an excessive load to the fully opened lever; otherwise, the lever may be deformed.



When the lever is half-opened, the cable cannot be inserted.

Don't pull out the FPC when the lever is locked; otherwise, this may result in a continuity failure or connector breakage. After an FPC is inserted, carefully handle it so as not to apply excessive stress to the base of the FPC.

For Cautions for Use, see the “NOTES FOR USING FPC CONNECTORS” in the [Connector Technical Information](#). For other details, please verify with the product specification sheets.