

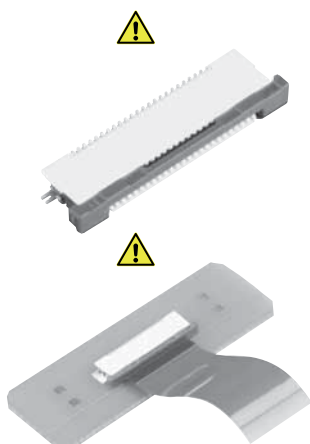
 Discontinued as of August 31, 2012

Panasonic
ideas for life

For FPC/FFC

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

Y5S Series

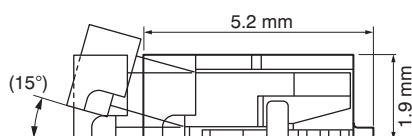


 Products are discontinued.

FEATURES

1. A wide variety of digital equipments

The 0.5mm pitch, 1.9mm height, and 5.2mm depth are suitable for a variety of digital equipment.



2. Slide lock structure

The slide 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

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51: FPC Connector 0.5 mm pitch
(Slide 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
1.9 mm	15	AYF511515	2,000 pieces	4,000 pieces
	24	AYF512415		

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

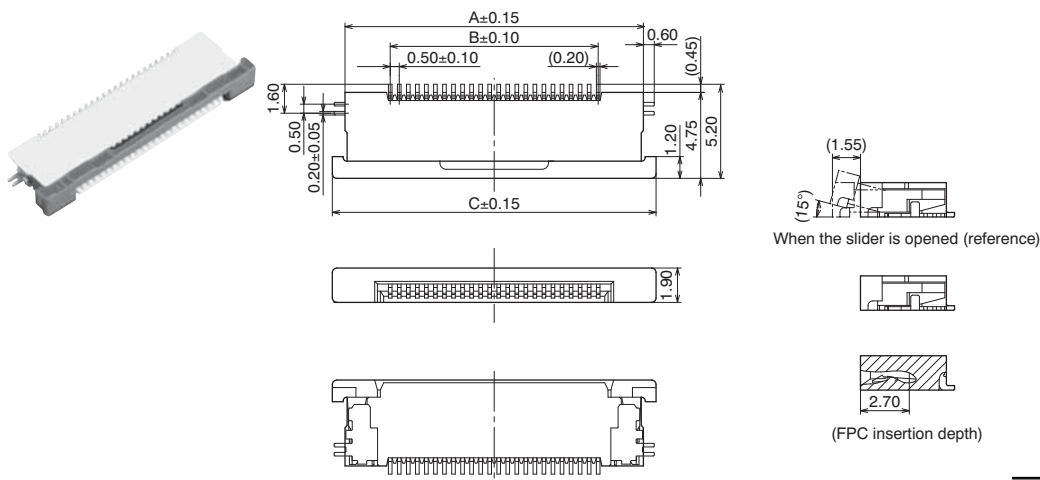
1. Characteristics

Item		Specifications	Conditions
Electrical characteristics	Rated current	0.5A/contact	
	Rated voltage	50V AC/DC	
	Insulation resistance	Min. 1,000M Ω (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. 45m Ω	Based on the contact resistance measurement method specified by JIS C 5402.
Mechanical characteristics	FPC/FFC holding force	Min. 0.2N/contacts $\times$ 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. 1.5N/contacts	Measuring the maximum force. As the contact is axially pull out.
	Soldering terminal holding force	Min. 1.5N/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. 45m Ω	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. 500M Ω , contact resistance max. 45m Ω	Bath temperature 40 $\pm$ 2°C, humidity 90 to 95% R.H.
	Saltwater spray resistance (with FPC/FFC inserted)	24 hours, contact resistance max. 45m Ω	Bath temperature 35 $\pm$ 2°C, saltwater concentration 5 $\pm$ 1%
	H ₂ S resistance (with FPC/FFC inserted)	48 hours, contact resistance max. 45m Ω	Bath temperature 40 $\pm$ 2°C, gas concentration 3 $\pm$ 1 ppm, humidity 75% R.H.
	Soldering heat resistance	Peak temperature: 250°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		24-contact type: 0.32 g	

2. Material and surface treatment

Part name	Material	Surface treatment
Molded portion	Housing: Polyamide resin Slider: PPS 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

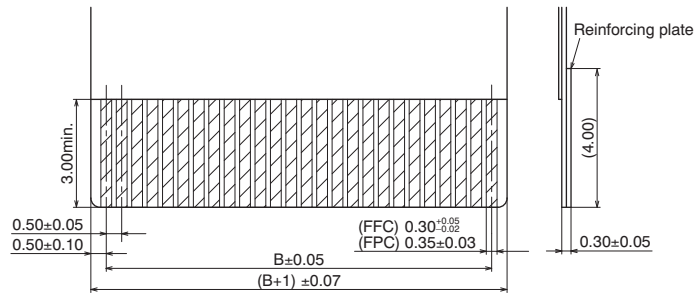
DIMENSIONS (Unit: mm)



Number of contacts/ dimension	A	B	C
15	12.0	7.0	13.4
24	16.5	11.5	17.9

RECOMMENDED FPC/FFC DIMENSIONS

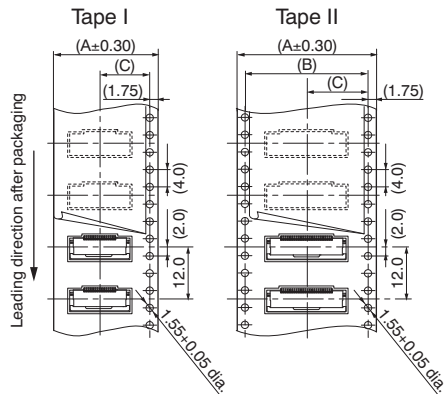
Surface finish: Au plating



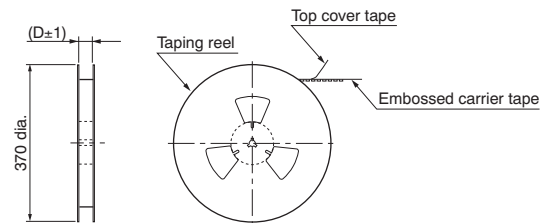
Number of contacts/ dimension	B
15	7.0
24	11.5

EMBOSSED TAPE DIMENSIONS (Unit: mm)

• Specifications for taping



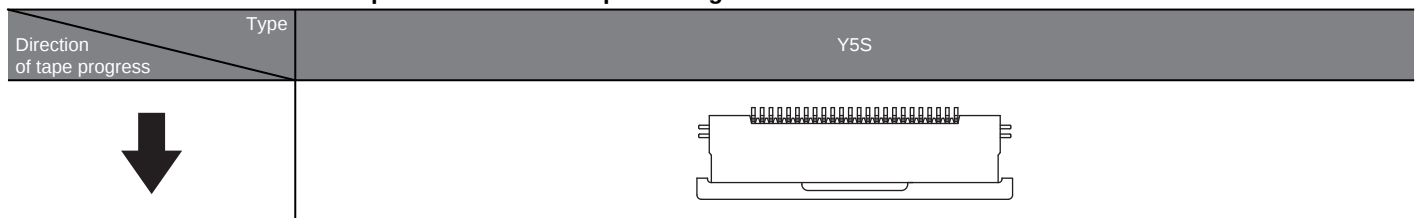
• Specifications for reel



• Dimension table (Unit: mm)

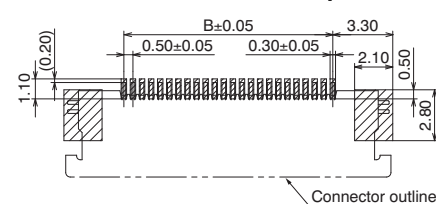
Number of contacts	Type of taping	A	B	C	D	Quantity per reel
15 contacts	Tape I	24.0	—	11.5	25.0	2,000
24 contacts	Tape II	32.0	28.4	14.2	33.0	2,000

• Connector orientation with respect to embossed tape feeding direction



NOTES

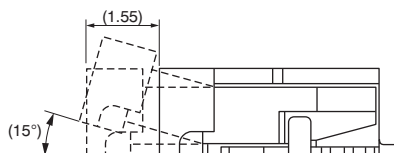
1. Recommended PC board pattern



Number of contacts/ dimension	B
15	7.0
24	11.5

2. Precautions for insertion/removal of FPC/FFC

A load applied to the slider unevenly or on only one side may deform the slider. Fully open the slider lock to insert an FPC. Don't further apply an excessive load to the fully released slider lock; otherwise, the slider may be deformed.



Remove the FPC in a direction parallel to the board with the slider lock fully released. If the slider is closed, or if the FPC is forcedly pulled into a direction parallel to the board, the connector may break. 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.