

Specifications

Insulation Resistance: 100MΩ minimum
 Contact Resistance: 20mΩ maximum
 Withstanding Voltage: 500V ACrms for 1 minute
 Voltage Rating: 125V DC
 Current Rating: 1A
 Operating Temp. Range: -25°C to +85°C
 Solder Temperature: 230°C min. / 60 sec., 250°C peak
 Mating Cycles: min 30 times

Materials and Finish

Housing: High-Temp. Thermoplastic (UL94V-0)
 Actuator: High-Temp. Thermoplastic (UL94V-0)
 Contacts: Copper Alloy, Tin Plated



Features

- 180° SMT Zero Insertion Force connector for 1.00mm Flexible Flat Cable (FFC) and Flexible Printed Circuit (FPC) appliances

Part Number (Details)

FPC-96212 - ** 01 T&R

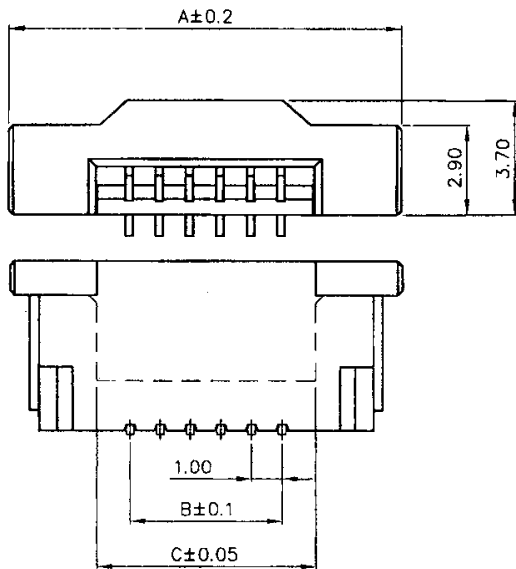
Series No.

No. of Contacts:
4 to 34 pins

Vertical Type (180° SMT)

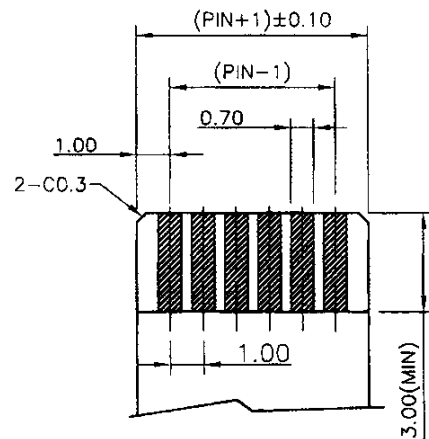
T&R: Tape and Reel 1,000pcs/reel

Outline Dimensions for Top Contact

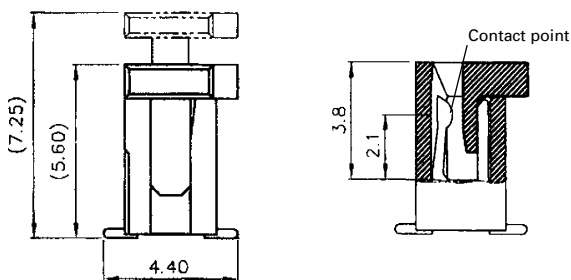


Recommended FPC Cable

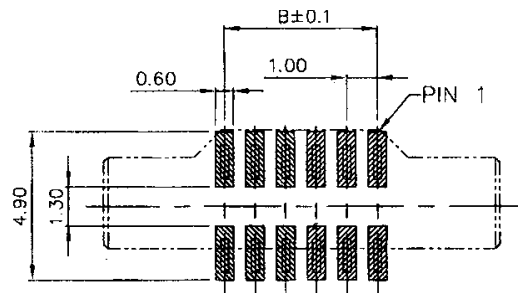
Thickness $t=0.30 \pm 0.03\text{mm}$



Contact (side view)



Recommended PCB Layouts



Part Number	Dim. A.	Dim. B.	Dim. C	Part Number	Dim. A.	Dim. B.	Dim. C	Part Number	Dim. A.	Dim. B.	Dim. C
FPC-96212-0401	11.00	3.00	5.15	FPC-96212-1501	22.00	14.00	16.15	FPC-96212-2401	31.00	23.00	25.15
FPC-96212-0501	12.00	4.00	6.15	FPC-96212-1601	23.00	15.00	17.15	FPC-96212-2501	32.00	24.00	26.15
FPC-96212-0601	13.00	5.00	7.15	FPC-96212-1701	24.00	16.00	18.15	FPC-96212-2601	33.00	25.00	27.15
FPC-96212-0701	14.00	6.00	8.15	FPC-96212-1801	25.00	17.00	19.15	FPC-96212-2701	34.00	26.00	28.15
FPC-96212-0801	15.00	7.00	9.15	FPC-96212-1901	26.00	18.00	20.15	FPC-96212-2801	35.00	27.00	29.15
FPC-96212-1001	17.00	9.00	11.15	FPC-96212-2001	27.00	19.00	21.15	FPC-96212-3001	37.00	29.00	31.15
FPC-96212-1101	18.00	10.00	12.15	FPC-96212-2101	28.00	20.00	22.15	FPC-96212-3201	39.00	31.00	33.15
FPC-96212-1201	19.00	11.00	13.15	FPC-96212-2201	29.00	21.00	23.15	FPC-96212-3301	40.00	32.00	34.15
FPC-96212-1301	20.00	12.00	14.15	FPC-96212-2301	30.00	22.00	24.15	FPC-96212-3401	41.00	33.00	35.15
FPC-96212-1401	21.00	13.00	15.15								

Series ZIF

ZIF for FFC / FPC Connector 1.00mm Pitch 90° SMT

Internal Connectors

Specifications

- Insulation Resistance: 100MΩ minimum
- Contact Resistance: 20mΩ maximum
- Withstanding Voltage: 500V ACrms for 1 minute
- Voltage Rating: 125V DC
- Current Rating: 1A
- Operating Temp. Range: -25°C to +85°C
- Solder Temperature: 230°C min. / 60 sec., 260°C peak
- Mating Cycles: min 30 times

Materials and Finish

- Housing: High-Temp. Thermoplastic (UL94V-0)
- Actuator: High-Temp. Thermoplastic (UL94V-0)
- Contacts: Copper Alloy, Tin Plated



Features

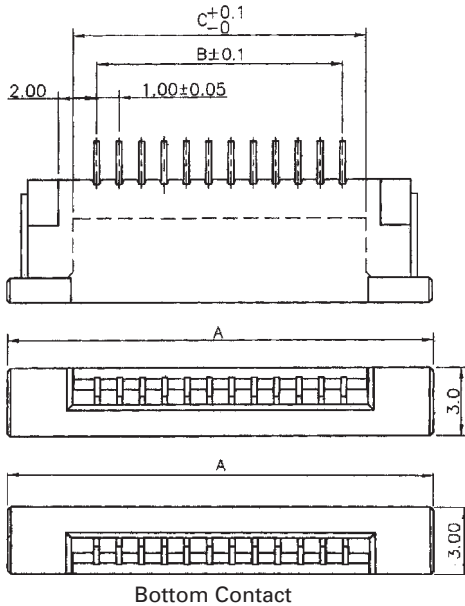
- 90° SMT Zero Insertion Force connector for 1.00mm Flexible Flat Cable (FFC) and Flexible Printed Circuit (FPC) appliances
- Top or bottom contact type

Part Number (Details)

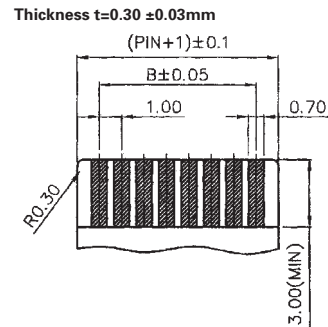
FPC-96212 - ** *1 - T&R

Series No.	
No. of Contacts:	4 to 34 pins
1 = Top Contact	
2 = Bottom Contact	
T&R:	Tape and Reel 1,500pcs/reel

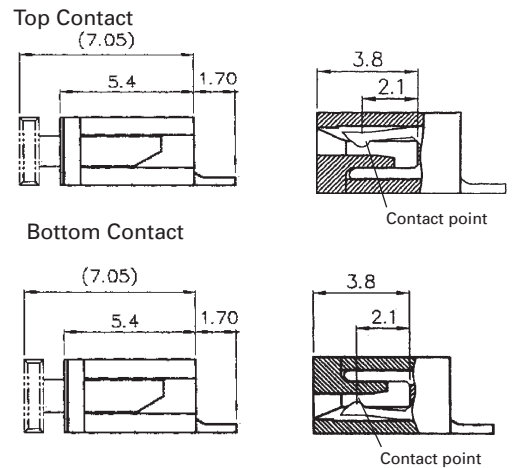
Outline Dimensions for Top Contact



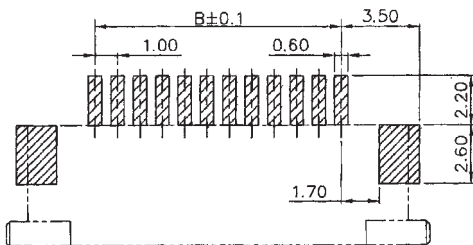
Recommended FPC Cable



Contacts (side view)



Recommended PCB Layouts



Part Number	Dim. A.	Dim. B.	Dim. C	Part Number	Dim. A.	Dim. B.	Dim. C	Part Number	Dim. A.	Dim. B.	Dim. C
FPC-96212-04*1	11.00	3.00	5.15	FPC-96212-15*1	22.00	14.00	16.15	FPC-96212-26*1	33.00	25.00	27.15
FPC-96212-05*1	12.00	4.00	6.15	FPC-96212-16*1	23.00	15.00	17.15	FPC-96212-2721	34.00	26.00	28.15
FPC-96212-06*1	13.00	5.00	7.15	FPC-96212-17*1	24.00	16.00	18.15	FPC-96212-28*1	35.00	27.00	29.15
FPC-96212-07*1	14.00	6.00	8.15	FPC-96212-18*1	25.00	17.00	19.15	FPC-96212-30*1	37.00	29.00	31.15
FPC-96212-08*1	15.00	7.00	9.15	FPC-96212-1921	26.00	18.00	20.15	FPC-96212-3221	39.00	31.00	33.15
FPC-96212-0911	16.00	8.00	10.15	FPC-96212-20*1	27.00	19.00	21.15	FPC-96212-34*1	41.00	33.00	35.15
FPC-96212-10*1	17.00	9.00	11.15	FPC-96212-22*1	29.00	21.00	23.15				
FPC-96212-11*1	18.00	10.00	12.15	FPC-96212-23*1	30.00	22.00	24.15				
FPC-96212-12*1	19.00	11.00	13.15	FPC-96212-24*1	31.00	23.00	25.15				
FPC-96212-13*1	20.00	12.00	14.15	FPC-96212-25*1	32.00	24.00	26.15				
FPC-96212-14*1	21.00	13.00	15.15	FPC-96212-25*1	32.00	24.00	26.15				

Specifications

Insulation Resistance:	100MΩ minimum
Contact Resistance:	20mΩ maximum
Withstanding Voltage:	500V ACrms for 1 minute
Voltage Rating:	50V DC
Current Rating:	0.5A
Operating Temp. Range:	-20°C to +85°C
Solder Temperature:	230°C min. / 60 sec., 250°C peak
Mating Cycles:	min 30 times

Materials and Finish

Housing: High-Temp. Thermoplastic (UL94V-0)
 Actuator: High-Temp. Thermoplastic (UL94V-0)
 Contacts: Copper Alloy, Tin Plated

Features

- 180° SMT Zero Insertion Force connector for 0.50mm Flexible Flat Cable (FFC) and Flexible Printed Circuit (FPC) appliances

Part Number (Details)

FPC-98210- ** 01 T&R

Series No.

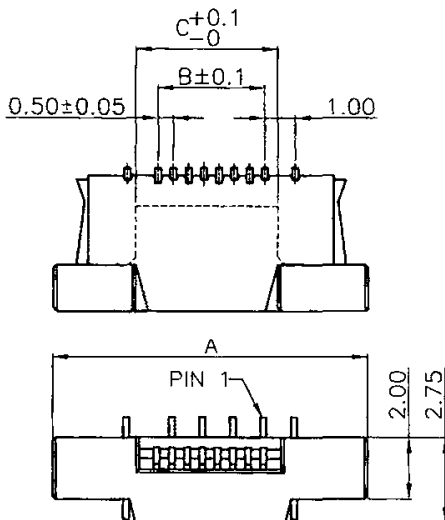
No. of Contacts:
4 to 50 pins

Vertical Type (180° SMT)

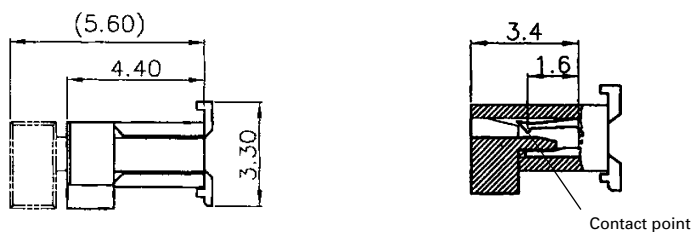
T&R: Tape and Reel 1,000pcs/reel



Outline Dimensions for Top Contact

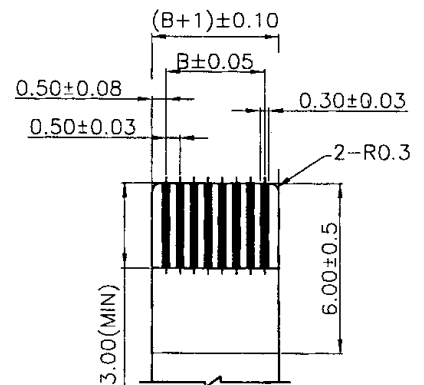


Contacts (side view)

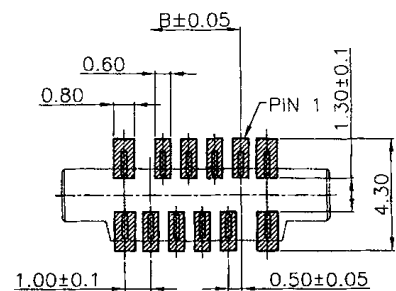


Recommended FPC Cable

Thickness $t=0.30 \pm 0.03\text{mm}$



Recommended PCB Layouts



Part Number	Dim. A.	Dim. B.	Dim. C.
FPC-98210-0401	8.50	1.50	2.60
FPC-98210-0501	9.00	2.00	3.10
FPC-98210-0601	9.50	2.50	3.60
FPC-98210-0801	10.50	3.50	4.60
FPC-98210-0901	11.00	4.00	5.10
FPC-98210-1001	11.50	4.50	5.60
FPC-98210-1101	12.00	5.00	6.10
FPC-98210-1201	12.50	5.50	6.60
FPC-98210-1301	13.00	6.00	7.10
FPC-98210-1401	13.50	6.50	7.60
FPC-98210-1501	14.00	7.00	8.10
FPC-98210-1601	14.50	7.50	8.60

Part Number	Dim. A.	Dim. B.	Dim. C.
FPC-98210-1701	15.00	8.00	9.10
FPC-98210-1801	15.50	8.50	9.60
FPC-98210-2001	16.50	9.50	10.60
FPC-98210-2101	17.00	10.00	11.10
FPC-98210-2201	17.50	10.50	11.60
FPC-98210-2401	18.50	11.50	12.60
FPC-98210-2501	19.00	12.00	13.10
FPC-98210-2701	20.00	13.00	14.10
FPC-98210-2801	20.50	13.50	14.60
FPC-98210-2601	19.50	12.50	13.60
FPC-98210-3001	21.50	14.50	15.60
FPC-98210-3201	22.50	15.50	16.60

Part Number	Dim. A.	Dim. B.	Dim. C.
FPC-98210-3301	23.00	16.00	17.10
FPC-98210-3401	23.50	16.50	17.60
FPC-98210-3601	24.50	17.50	18.60
FPC-98210-3901	26.00	19.00	20.10
FPC-98210-4001	26.50	19.50	20.60
FPC-98210-4101	27.00	20.00	21.10
FPC-98210-4401	28.50	21.50	22.60
FPC-98210-4501	29.00	22.00	23.10
FPC-98210-4801	30.50	23.50	24.60
FPC-98210-4901	31.00	24.00	25.10
FPC-98210-5001	31.50	24.50	25.60

Series ZIF

ZIF for FFC / FPC Connector 0.5mm Pitch 90° SMT

Internal Connectors

Specifications

Insulation Resistance:	100MΩ minimum
Contact Resistance:	20mΩ maximum
Withstanding Voltage:	500V ACrms for 1 minute
Voltage Rating:	50V DC
Current Rating:	0.5A
Operating Temp. Range:	-20°C to +85°C
Solder Temperature:	230°C min. / 60 sec., 250°C peak
Mating Cycles:	min 30 times

Materials and Finish

Housing: High-Temp. Thermoplastic (UL94V-0)
 Actuator: High-Temp. Thermoplastic (UL94V-0)
 Contacts: Copper Alloy, Tin Plated

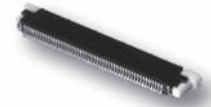
Features

- 90° SMT Zero Insertion Force connector for 0.50mm Flexible Flat Cable (FFC) and Flexible Printed Circuit (FPC) appliances
- Top or bottom contact type

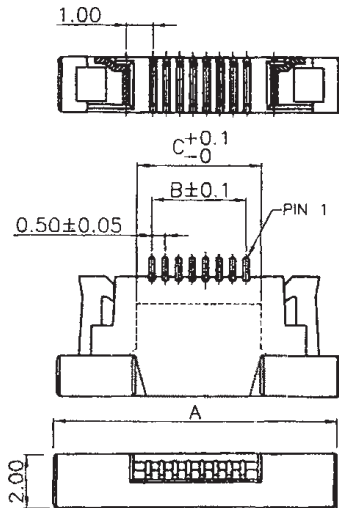
Part Number (Details)

FPC-98210- ** *1 T&R

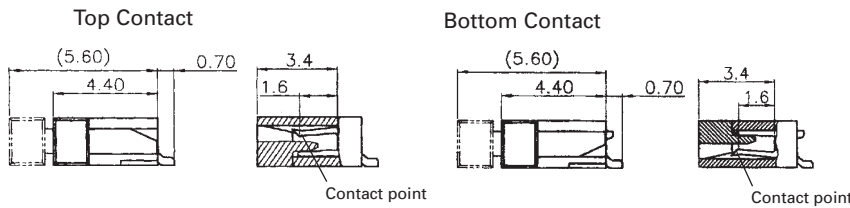
Series No.	
No. of Contacts: 4 to 50 pins	
1 = Top Contact 2 = Bottom Contact	
T&R: Tape and Reel 2,000pcs/reel	



Outline Dimensions for Top Contact

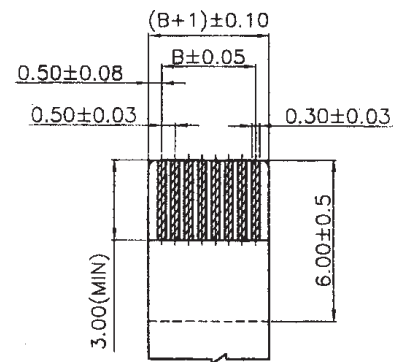


Contacts (side view)

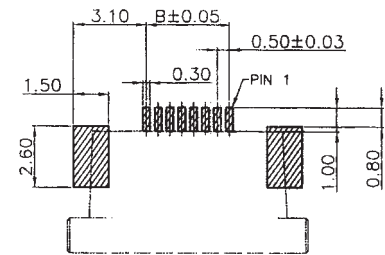


Recommended FPC Cable

Thickness $t=0.30 \pm 0.03\text{mm}$



Recommended PCB Layouts



ZIF for FPC / FFC Connectors

Part Number	Dim. A.	Dim. B.	Dim. C
FPC-98210-04*1	8.50	1.50	2.60
FPC-98210-05*1	9.00	2.00	3.10
FPC-98210-06*1	9.50	2.50	3.60
FPC-98210-07*1	10.00	3.00	4.10
FPC-98210-08*1	10.50	3.50	4.60
FPC-98210-0911	11.00	4.00	5.10
FPC-98210-10*1	11.50	4.50	5.60
FPC-98210-11*1	12.00	5.00	6.10
FPC-98210-12*1	12.50	5.50	6.60
FPC-98210-13*1	13.00	6.00	7.10
FPC-98210-14*1	13.50	6.50	7.60
FPC-98210-15*1	14.00	7.00	8.10
FPC-98210-16*1	14.50	7.50	8.60
FPC-98210-17*1	15.00	8.00	9.10
FPC-98210-18*1	15.50	8.50	9.60
FPC-98210-1911	16.00	9.00	10.10

Part Number	Dim. A.	Dim. B.	Dim. C
FPC-98210-20*1	16.50	9.50	10.60
FPC-98210-21*1	17.00	10.00	11.10
FPC-98210-22*1	17.50	10.50	11.60
FPC-98210-23*1	18.00	11.00	12.10
FPC-98210-24*1	18.50	11.50	12.60
FPC-98210-25*1	19.00	12.00	13.10
FPC-98210-26*1	19.50	12.50	13.60
FPC-98210-27*1	20.00	13.00	14.10
FPC-98210-28*1	20.50	13.50	14.60
FPC-98210-2911	21.00	14.00	15.10
FPC-98210-30*1	21.50	14.50	15.60
FPC-98210-3111	22.00	15.00	16.10
FPC-98210-32*1	22.50	15.50	16.60
FPC-98210-33*1	23.00	16.00	17.10
FPC-98210-34*1	23.50	16.50	17.60
FPC-98210-36*1	24.50	17.50	18.60

Part Number	Dim. A.	Dim. B.	Dim. C
FPC-98210-3711	25.00	18.00	19.10
FPC-98210-38*1	25.50	18.50	19.60
FPC-98210-39*1	26.00	19.00	20.10
FPC-98210-40*1	26.50	19.50	20.60
FPC-98210-4111	27.00	20.00	21.10
FPC-98210-4211	27.50	20.50	21.60
FPC-98210-4311	28.00	21.00	22.10
FPC-98210-4411	28.50	21.50	22.60
FPC-98210-45*1	29.00	22.00	23.10
FPC-98210-4611	29.50	22.50	23.60
FPC-98210-47*1	30.00	23.00	24.10
FPC-98210-48*1	30.50	23.50	24.60
FPC-98210-4911	31.00	24.00	25.10
FPC-98210-50*1	31.50	24.50	25.60

Specifications

Insulation Resistance: 1,000MΩ min. at 500V DC
 Conductor Resistance: C1 max. 0.63 Ω/m
 C6 max. 1.826Ω /m
 Withstanding Voltage: 500V AC rms for 1 minute
 Voltage Rating: 30V (UL2896) or 60V (UL20706)
 Operating Temp. Range: -40°C to +80°C (UL2896)
 -40°C to +105°C (UL20706)

Materials and Finish

Conductor: Tin Plated Cu or Au Flash Plated
 Insulation: Polyester, white
 Stiffener: Polyester, blue

Features

- UL2896 or UL20706 available
- Number of Conductors with 0.50mm pitch = 8 to 200
- Number of Conductors with 1.00mm pitch = 4 to 100
- Shielded version available on request
- Minimum order quantity = 1,000 pcs for Tin version
- Minimum order quantity = 20 meters for Au version



Part Number (Details)

FC - P0.5 -C*-21 -32 -A-4-L-*

Series No.

Pitch:

P0.5 = 0.5mm P1.0 = 1.0mm

Conductor Cross-sec.

(Thickness x Width).

C1 = 0.05 x 0.65mm (P= 1.00mm)

C6 = 0.035 x 0.3mm (P= 0.50mm)

Number of Conductors

Insulation Length in mm

(Complete length = 2 x strip length)

Cable Type / Styles (see drawing below)

Length of Stripped Conductor in mm (dimension S)

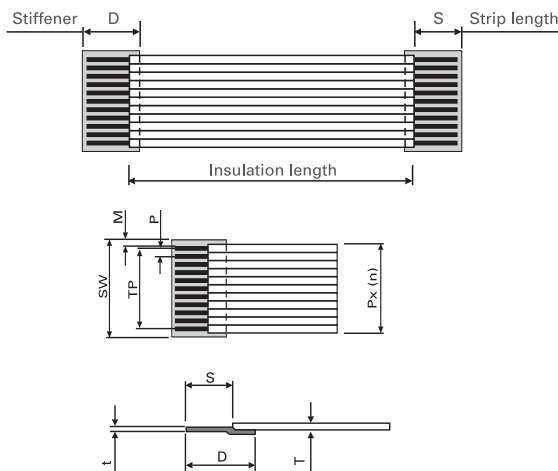
Plating: L = Tin

C = Au Flash

UL Styles: No Mark = UL2896

V = UL20706

Outline Dimensions



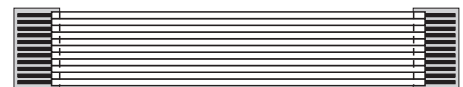
Item	Description	Specification
N	Number of Conductors	
P	Pitch in mm	0.5mm and 1.0mm
TP	Total Pitch	P x (n-1)
SW	Stiffener Width	P x (n+1)
M	Margin Width	C1 = 0.7mm C5 = 0.35mm
T	Thickness of FFC	C1 = 0.14mm C6 = 0.12mm
D	Stiffener Length	*Standard = 10mm
S	Stripped Length	3 or 4mm Standard
t	Terminal Thickness	0.3mm

*other lengths available on request

Cable Styles

For other pitches and cross-sections please contact Yamaichi

Type A (std.)



Type B (std.)

