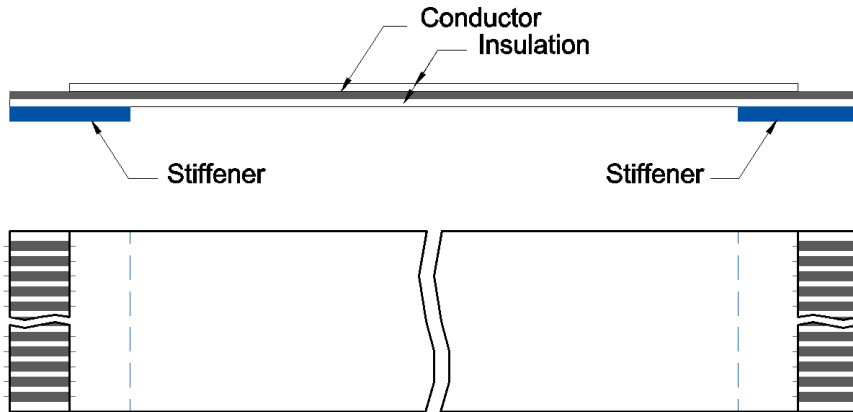


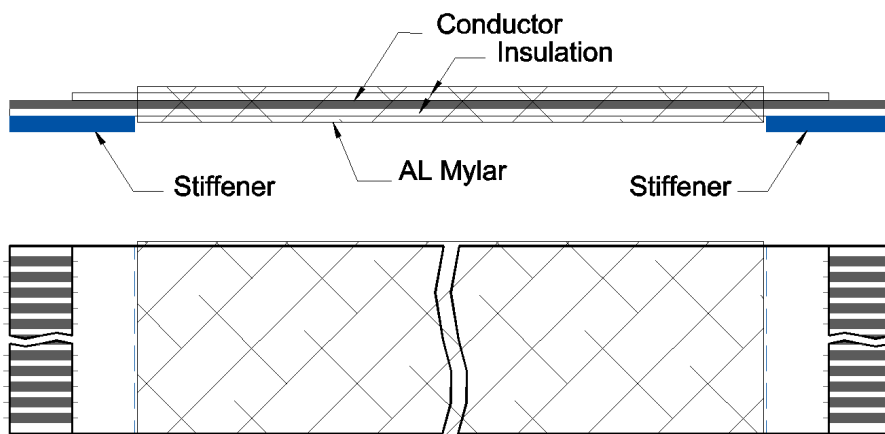
軟性排線 Flexible Flat Cable

1 > Cable Design Direction

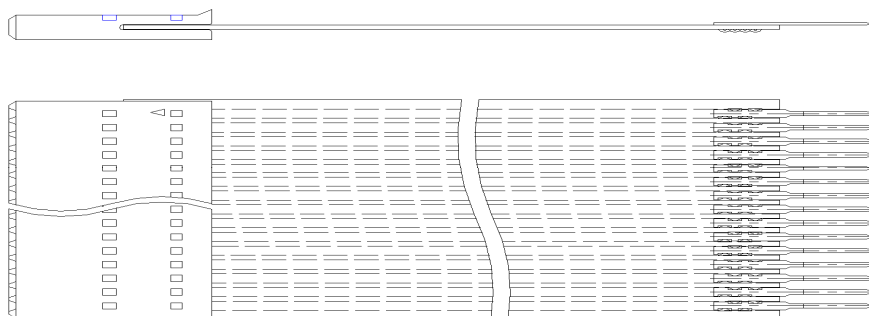
Standard Version



Shielded Version



Assembly Version



Other Processing Version

2 > Standard FFC Specification

ORDERING CODE

FFC 050 C 08 - S1-S2-S3-S4 - 030 - B(HF) - AL

1 2 3 4 5 6 7

1.CONDUCTOR PITCH :

Code	Conductor Pitch
050	PITCH : 0.5mm
100	PITCH : 1.0mm
125	PITCH : 1.25mm
127	PITCH : 1.27mm
254	PITCH : 2.54mm

2.STANDARD TYPE :

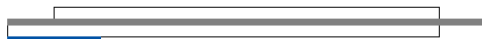
A TYPE



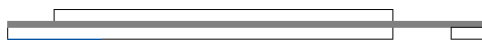
AS TYPE



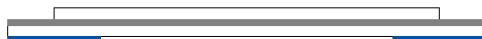
B TYPE



BS TYPE



C TYPE



D TYPE



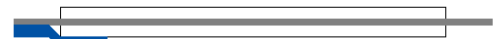
I TYPE



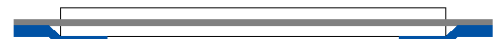
J TYPE



H TYPE



G TYPE



E TYPE



3.NUMBER OF CONDUCTORS :

02、03、04、05、.....、79、80

4.STRIP LENGTH & STIFFINER LENGTH :

S1/S2	S3/S4
STRIP LENGTH	STIFFINER LENGTH
2、3、4、5、6mm	4、5、6、8、10mm

5.TOTAL LENGTH :

025-∞ · 025=25mm

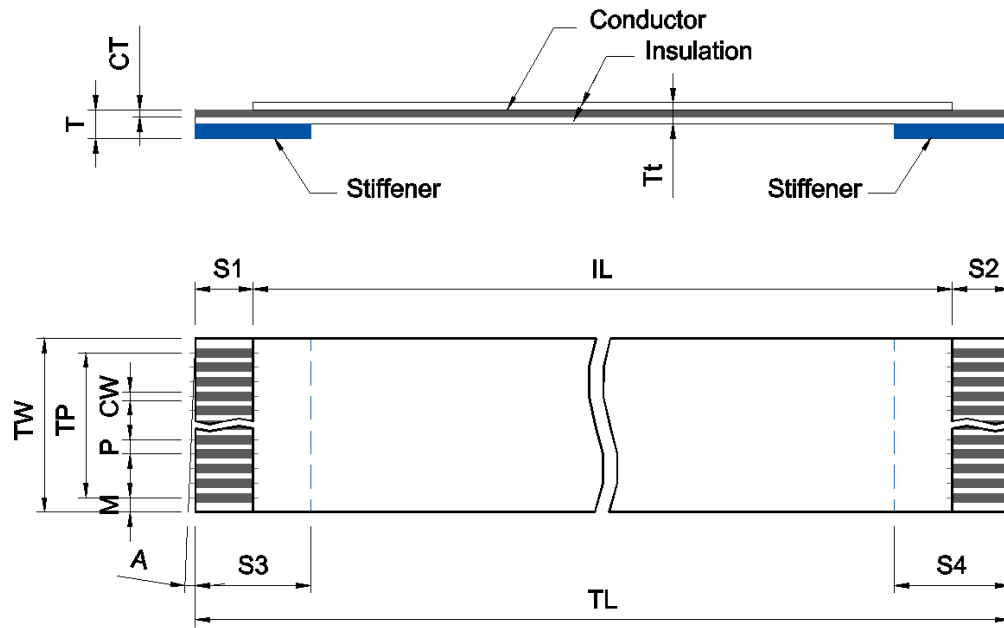
6.UL GRADE APPROVAL :

CODE	UL SATYLE	Volt. Rating	Temp. Rating
A	UL20624	60V	80°C
B	UL20706	60V	105°C
BHF	UL20706 無鹵	60V	105°C
C	UL2643	300V	105°C

7.SHIELDED and GOLD Version :

AL	AL Foil Mylar
CF	Conductive Fabric
CP	Copper Foil
G	Gold Plated Copper Flat Conductor

CONSTRUCTION & DIMENSION



項目	代碼	RANGE	PITCH : 0.5mm	PITCH : 1.0mm	PITCH : 1.25mm	PITCH : 1.27mm	PITCH : 2.54mm	
導體中心間距	P	TYPICAL	0.5±0.05	1.0±0.10	1.25±0.10	1.27±0.20	2.54±0.20	
導體 PIN 數	NC		4-80C	4-60C	2-46C	2-24C	2-24C	
總長度	TL	IL +S1 +S2		±1(25-99)	±3(100-299)	±5(300-599)		
絕緣長度	IL	25~∞		±8(600-999)	±10(over1000)			
總寬度	TW	P*(NC+1)	±0.08	±0.1	±0.20	±0.20	±0.20	
導體總寬度	TP	P*(NC-1)						
排線邊緣寬度	M	(TW-TP)/2	±0.08	±0.15	±0.20	±0.20	±0.30	
剝線長度	S1 / S2			2、3、4、5、6	±0.5			
補強板長度	S3 / S4			4、5、6、8、10	±1.0			
切口斜度	A	0			0.50 MAX			
導體寬度	CW	TYPICAL	0.3	0.6	0.5	0.8	0.85	1.27 1.45
導體厚度	CT	TYPICAL	0.035	0.05	0.1	0.05	0.08	0.08 0.08
排線厚度	Tt		0.15	0.17	0.22	0.17	0.20	0.20 0.20
末端厚度	T		0.30	0.32	0.38	0.33	0.36	0.36 0.36

Note :
other pitches available on request.
T=0.2mm on request.
more conductors on request.

MATERIALS

1. Conductor :

Conductor Dimension (Ct x Cw)	Material	Resistance (Ω/meter)	Current Rating (Amp)	AWG
0.035 x 0.3	Tin Plated Copper Gold Plated Copper	1.89	0.5	37
0.1 x 0.5	Tin Plated Copper	0.42	1.0	30
0.05 x 0.6	Tin Plated Copper	0.67	1.0	32
0.05 x 0.8	Tin Plated Copper	0.53	1.0	31
0.08 x 0.85	Tin Plated Copper	0.35	2.0	29
0.08 x 1.27	Tin Plated Copper	0.17	2.5	27
0.08 x 1.45	Copper	0.16	3.0	26

Note :

Tin Plated Copper Flat Conductor. Typical plating thickness 2~3um.

Gold Plated Copper Flat Conductor. Typical plating thickness Ni1.0um Au0.075um

2. Insulation Film : PET FILM with Polyester adhesive, COLOR : WHITE.

YC CODE	THICKNESS			FILM MATERIAL	ADHESIVE	COLOR
	Film	Adhesive	Total			
YCP16-37	16μm	21μm	37μm	PET		WHITE
YCP19-43	19μm	24μm	43μm	PET	PET base	WHITE
YCP25-60	25μm	35μm	60μm	PET	hot melt glue	WHITE
YCP50-80	50μm	50μm	80μm	PET		WHITE

3. Stiffener : PET FILM with Polyester adhesive, COLOR : BLUE.

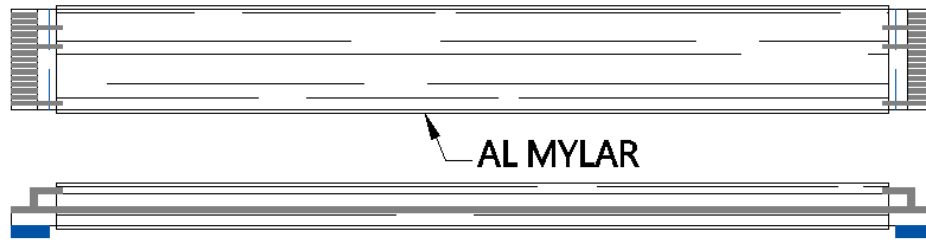
YC CODE	THICKNESS			FILM MATERIAL	ADHESIVE	COLOR
	Film	Adhesive	Total			
YCP125-155	125μm	30μm	155μm	PET		BLUE
YCP175-205	175μm	30μm	205μm	PET	PET base hot melt glue	BLUE
YCP188-225	188μm	37μm	225μm	PET		BLUE


Reliability Tests

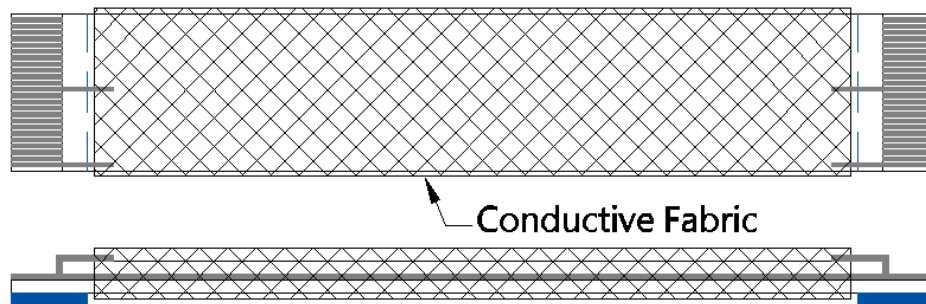
電氣特性 Electrical Characteristics		
測試項目 Test Item	測試條件 Test Conditions	測試結果 Result
導通 Open/Short	5V 3Ω	Continuity test passed
絕緣組抗 Insulation Resistance	DC500V at 20°C	Conductor to Conductor ≥100MΩ
耐電壓 Withstand Voltage	Pitch : 0.5mm AC200V Pitch : 1.0mm UP AC500V	for 1 minute <3mA
物理/化學特性 Physical and Chemical Characteristics		
測試項目 Test Item	測試條件 Test Conditions	測試結果 Result
耐熱性 Heat Resistance	UL20624 85°C / 96Hrs.	Insulation resistance and withstand voltage properties unchanged
熱循環 Heat Cycle	-40°C --> 25°C --> 85°C--> 25°C(12Hrs*2cycles)	Insulation resistance and withstand voltage properties unchanged
耐濕性 Humidity Resistance	40°C*95% RH*96Hrs.	Insulation resistance and withstand voltage properties unchanged
鹽水測試 Salt Water Spray	5% * 35°C*48Hrs.	Insulation resistance and withstand voltage properties unchanged
耐燃性 Flammability	UL 758	Pass UL VW-1
機械特性 Mechanical Characteristics		
測試項目 Test Item	測試條件 Test Conditions	測試結果 Result
耐屈撓性 Flexibility	10mm R / 10cm / 70 cycles / min	≥100,000 cycles
耐曲折性 Bending	± 90° / 600g / 5mm R	≥20 cycles
耐摩擦性 Abrasion Resistance	φ5mm / 600g / 60 cycles / min	≥10,000 cycles

3 > Shielded FFC

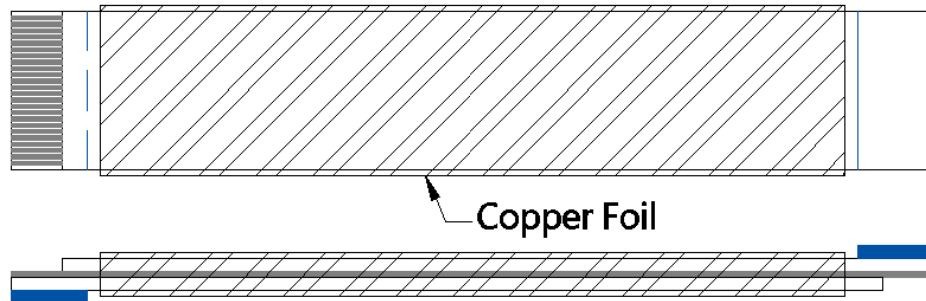
AL AL MYLAR



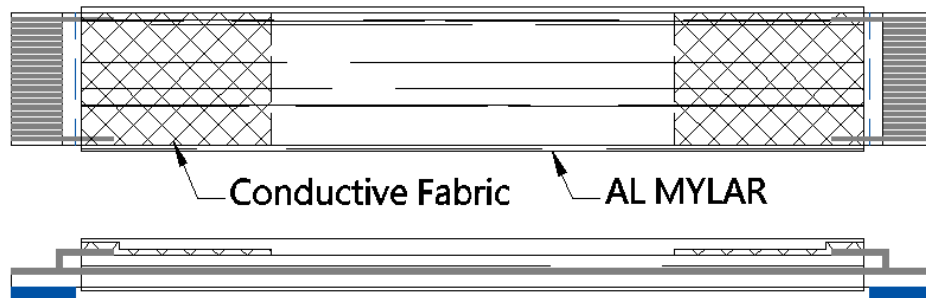
CF Conductive Fabric



CP Copper Foil

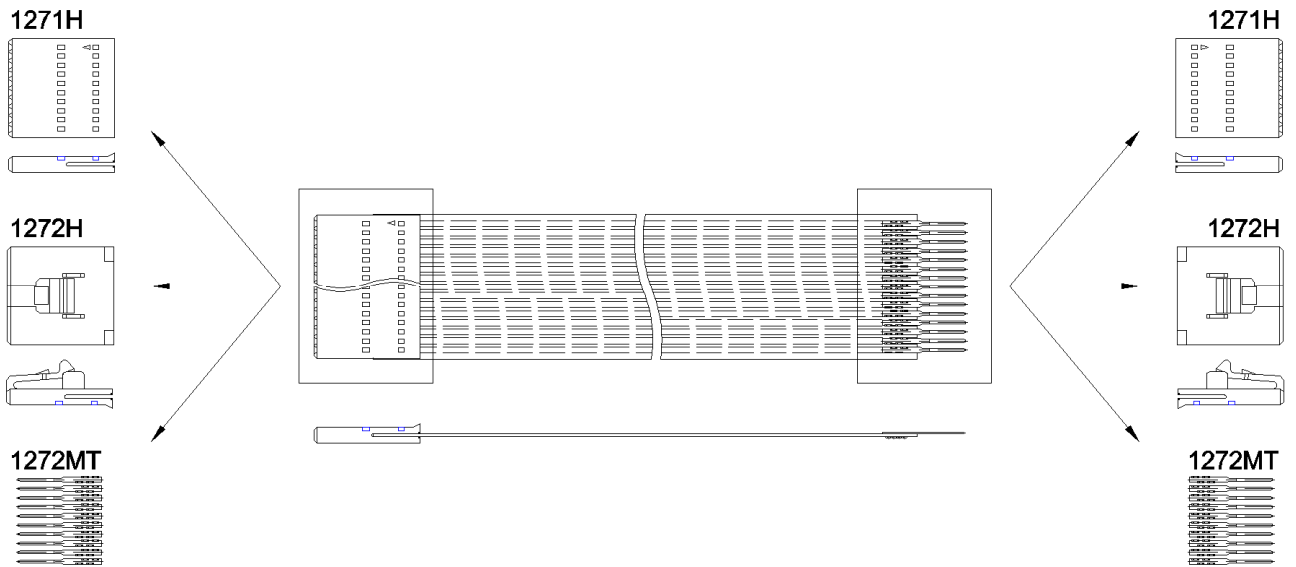


Conductive Fabric / AL MYLAR / Ground

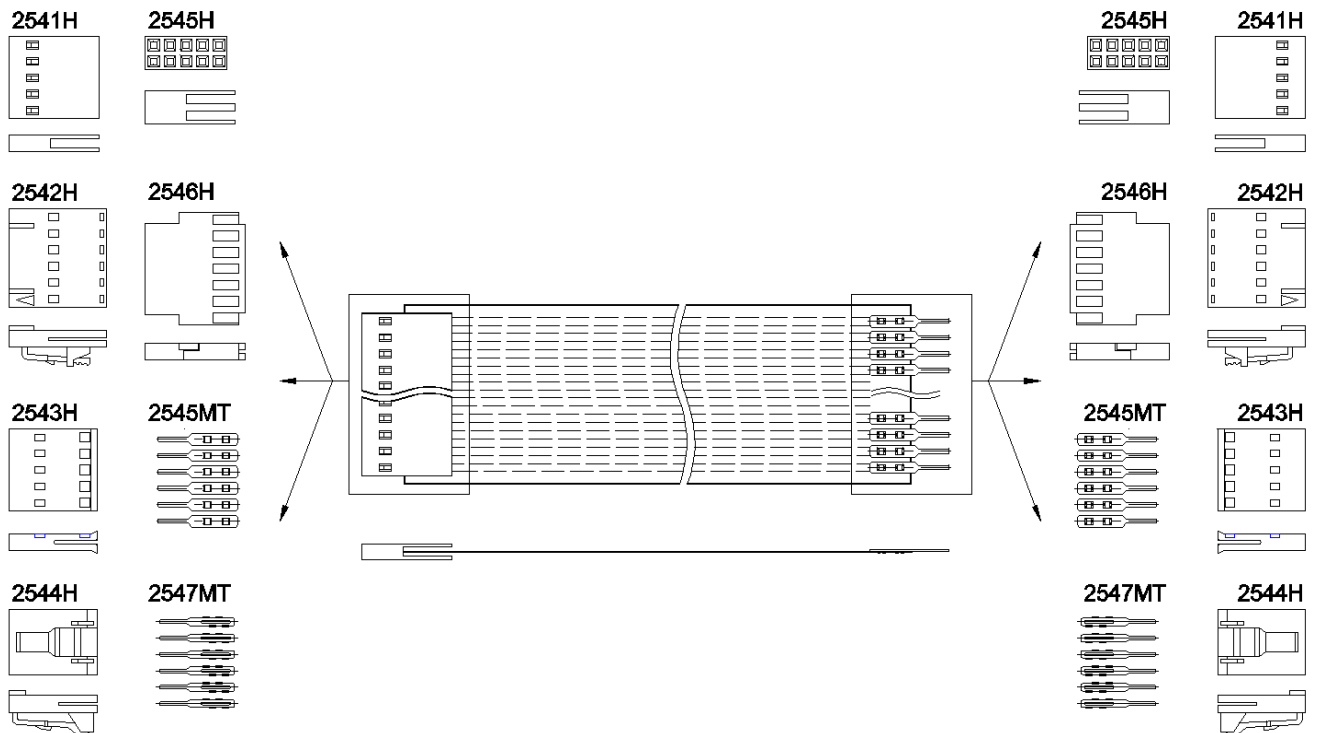


4 > FFC Assembly

🌐 FFC Pitch : 1.27mm assembly



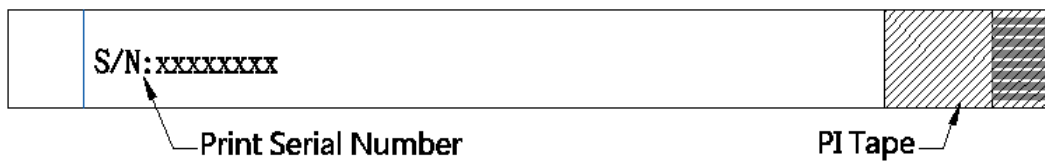
🌐 FFC Pitch : 2.54mm assembly



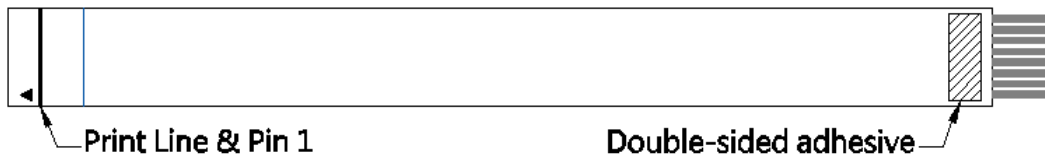
🌐 LVDS FFC Pitch : 0.5、1.0mm assembly

5 > Other Processing

Print & PI Tape (Protect Conductor)



Print Line and Pin1 & Double-sided adhesive



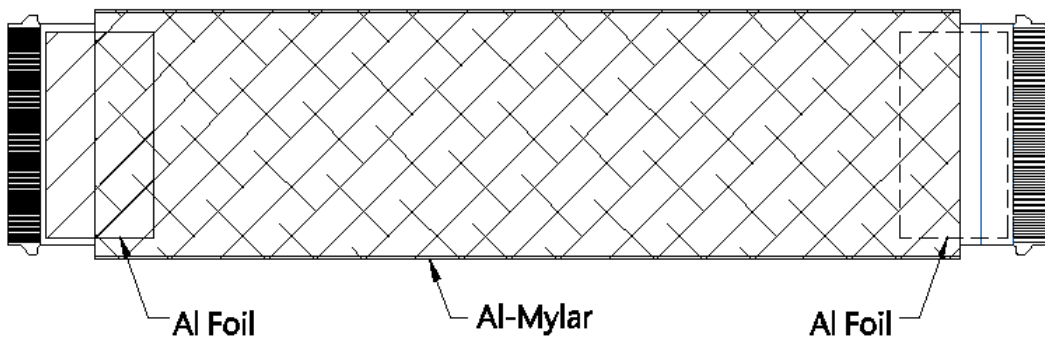
Stamping for Connector



Folding



Mixing process-Stamping,Al Foil,Al-Mylar



6 > FFC Inquire Form

Customer :

Model Name :

Date :

UL Rating.	Pitch	Conductor Dimension	PIN NO.	Product Length	Strip Length	Stiffner Length	Product Type
<input type="checkbox"/> 20624 <input type="checkbox"/> 20706 <input type="checkbox"/> 2643	<input type="checkbox"/> 0.5mm	<input type="checkbox"/> 0.035*0.3mm					<input type="checkbox"/> A TYPE
	<input type="checkbox"/> 1.0mm	<input type="checkbox"/> 0.1*0.5mm					<input type="checkbox"/> AS TYPE
		<input type="checkbox"/> 0.05*0.6mm			<input type="checkbox"/> 2/2	<input type="checkbox"/> 4/4	<input type="checkbox"/> B TYPE
	<input type="checkbox"/> 1.25mm	<input type="checkbox"/> 0.05*0.8mm			<input type="checkbox"/> 3/3	<input type="checkbox"/> 5/5	<input type="checkbox"/> BS TYPE
					<input type="checkbox"/> 4/4	<input type="checkbox"/> 6/6	<input type="checkbox"/> C TYPE
	<input type="checkbox"/> 1.27mm	<input type="checkbox"/> 0.08*0.85mm			<input type="checkbox"/> 5/5	<input type="checkbox"/> 8/8	<input type="checkbox"/> D TYPE
					<input type="checkbox"/> 6/6	<input type="checkbox"/> 10/10	<input type="checkbox"/> E TYPE
					<input type="checkbox"/> 7S3/7S3		<input type="checkbox"/> G TYPE
							<input type="checkbox"/> H TYPE
	<input type="checkbox"/> 2.54mm	<input type="checkbox"/> 0.08*1.27mm					<input type="checkbox"/> I TYPE
	<input type="checkbox"/> 0.08*1.45mm					<input type="checkbox"/> J TYPE	

Drawing
 Approval Sheet
 MOQ _____ pcs
 L/T _____
 Price _____