



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



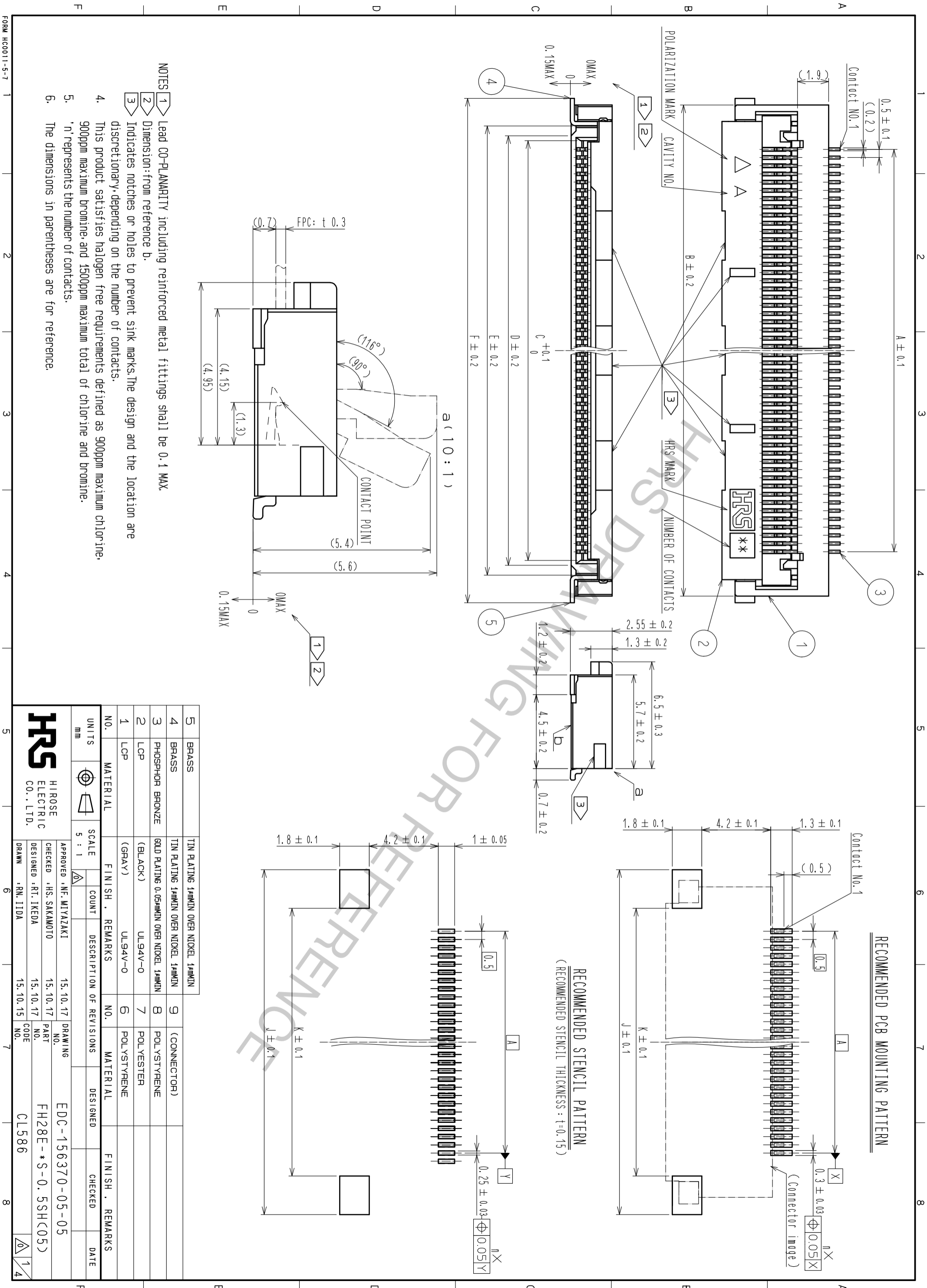
## Contact us

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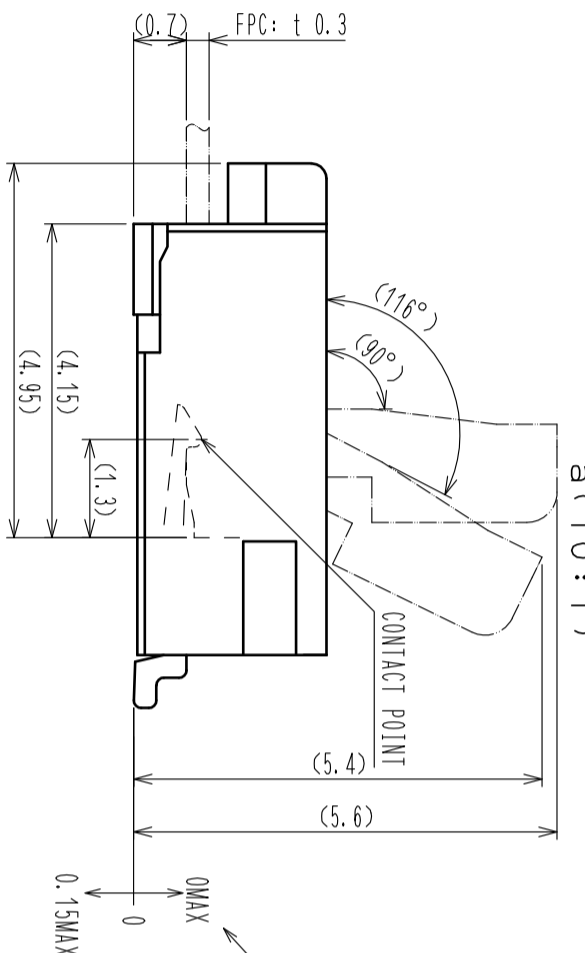
Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



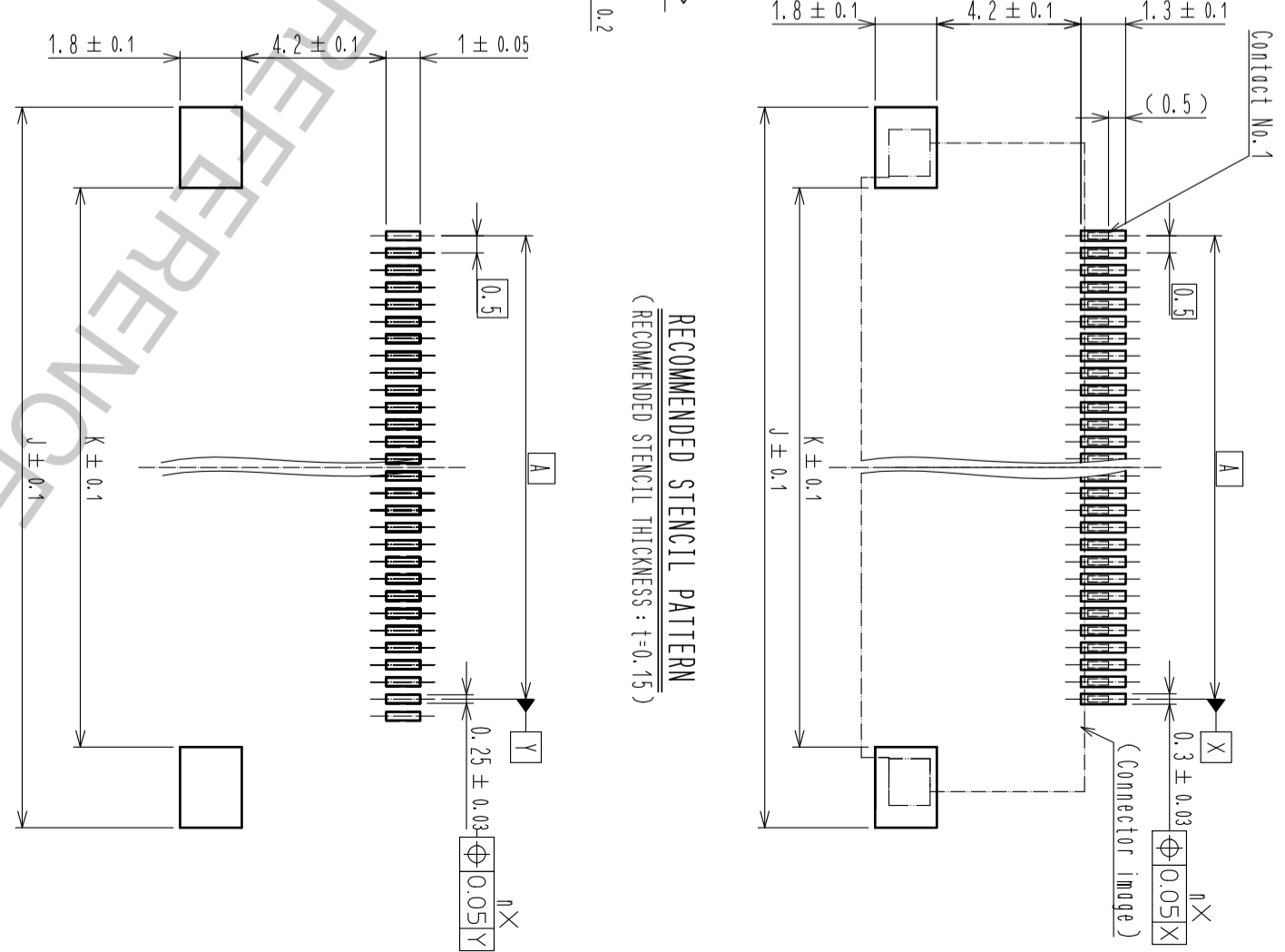


NOTES

- Lead CO-PLANARITY including reinforced metal fittings shall be  $0.1 \text{ MAX}$ .
- Dimension: from reference b.
- Indicates notches or holes to prevent sink marks. The design and the location are discretionary, depending on the number of contacts.
- This product satisfies halogen free requirements defined as 900ppm maximum chlorine, 900ppm maximum bromine, and 1500ppm maximum total of chlorine and bromine.
- 'n' represents the number of contacts.
- The dimensions in parentheses are for reference.



RECOMMENDED STENCIL PATTERN  
(RECOMMENDED STENCIL THICKNESS:  $t=0.15$ )

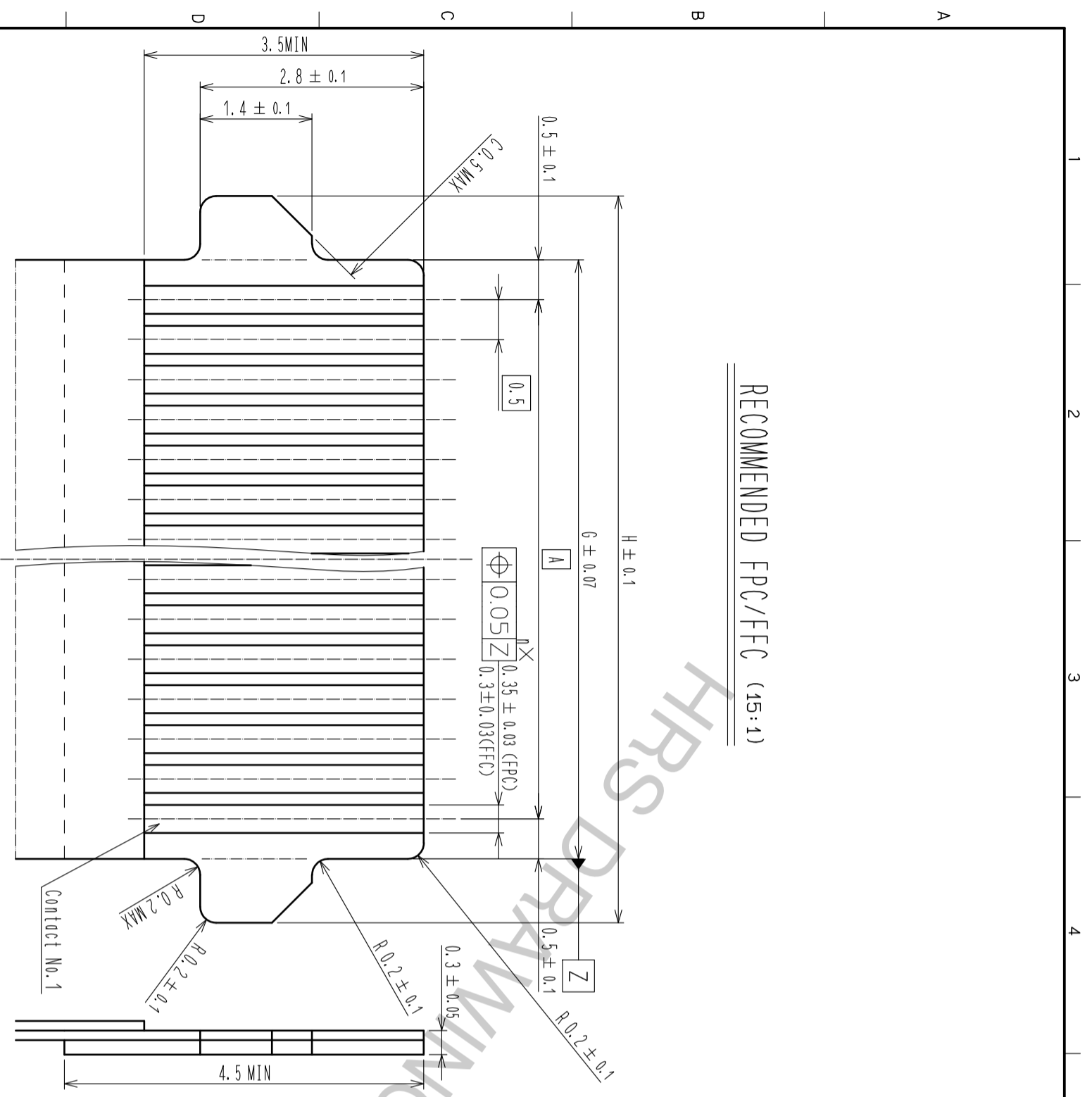


NO.	MATERIAL	FINISH	REMARKS	NO.	MATERIAL	FINISH	REMARKS
5	BRASS	TIN PLATING	1μMIN OVER NICKEL 1μMIN	9	(CONNECTOR)		
4	BRASS	TIN PLATING	1μMIN OVER NICKEL 1μMIN	8	POLYSTYRENE		
3	PHOSPHOR BRONZE	GOLD PLATING	0.05μMIN OVER NICKEL 1μMIN	7	POLYESTER		
2	LCP	(BLACK)	UL94V-0	6	POLYSTYRENE		
1	LCP	(GRAY)	UL94V-0				

**HRS** HIROSE ELECTRIC CO., LTD.

APPROVED: NF. MIYAZAKI 15.10.17  
 CHECKED: HS. SAKAMOTO 15.10.17  
 DESIGNED: RT. IKEDA 15.10.17  
 DRAWN: RN. IIDA 15.10.15

EDC-156370-05-05  
 FH28E-S-0.5SH(05)  
 CL586



RECOMMENDED FPC/FFC (15:1)

FPC CONFIGURATION (REFERENCE EXAMPLE)

(SCALE: FREE)

MATERIAL NAME	MATERIAL	THICKNESS (μm)
COVERING FILM LAYER	POLYIMIDE 1μm1 thick.	(25)
COVER ADHESIVE		(25)
SURFACE TREATMENT	Nickel undercoat 1 to 5μm + Gold plating 0.2μm	3
COPPER FOIL	CU 1 OZ	35
BASE ADHESIVE	HEAT-HARDENED ADHESIVE	25
BASE FILM	POLYIMIDE 1μm1 thick	25
REINFORCING MATERIAL ADHESIVE	HEAT-HARDENED ADHESIVE	30
STIFFENER FILM	POLYIMIDE 7 μm1 thick	175

FFC CONFIGURATION (REFERENCE EXAMPLE)

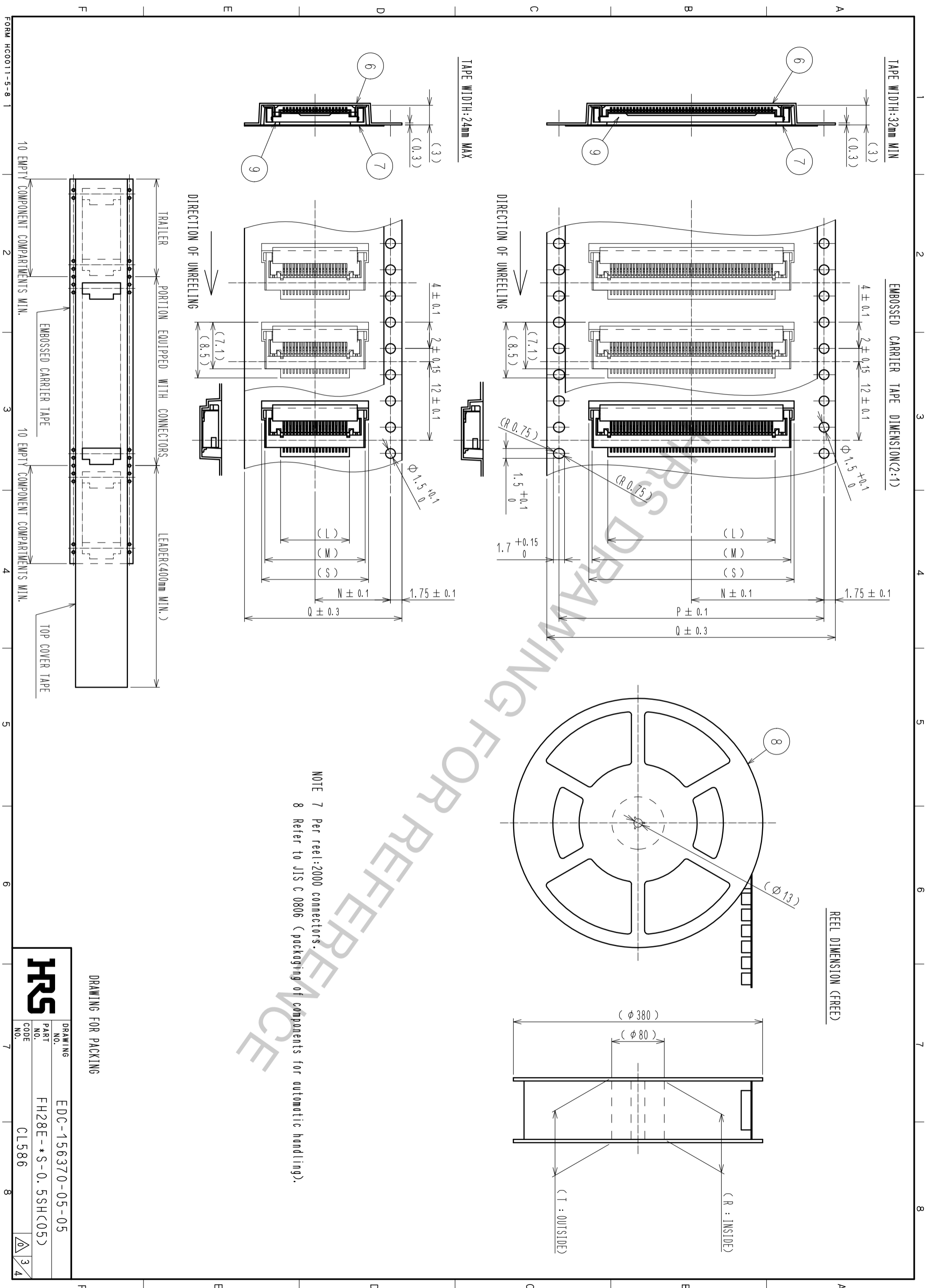
(SCALE: FREE)

MATERIAL NAME	MATERIAL	THICKNESS (μm)
POLYESTER FILM		12
ADHESIVE	THERMOPLASTIC POLYESTER	30
GOLD PLATED SOFT COPPER FILM		35
ADHESIVE	POLYESTER	30
POLYESTER		12
ADHESIVE	POLYESTER	30
STIFFENER FILM	POLYESTER	188

FORM HCO011-5-8

DRAWING NO.	EDC-156370-05-05
PART NO.	FH28E-*S-0.5SH(05)
CODE	CL586

**HRS**



DRAWING FOR PACKING

<b>HRS</b>	DRAWING NO.	EDC-156370-05-05
	PART NO.	FH28E-*S-0.5SH(05)
	CODE	CL586
	NO.	

FORM HC0011-5-8

PART NO.	CODE NO.	Number of contact	DIMENSION TABLE OF CONNECTOR, FPC, FFC, LAND PATTERN AND STENCIL PATTERN													DIMENSION TABLE OF DRAWING FOR PACKING									
			A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R	T	S					
FH28E-20S-0.5SH(05)	CL580-1822-2-05	20	9.5	14.9	10.57	11.15	12.35	15.7	10.5	12.1	16.7	12	10.5	15.3	11.5	-	24	25.4	29.4	16.3					
FH28E-30S-0.5SH(05)	CL580-1833-9-05	30	14.5	19.9	15.57	16.15	17.35	20.7	15.5	17.1	21.7	17	15.5	20.3	14.2	28.4	32	33.4	37.4	21.3					
FH28E-40S-0.5SH(07)	CL580-1814-4-07	40	19.5	24.9	20.57	21.15	22.35	25.7	20.5	22.1	26.7	22	20.5	25.3	20.2	40.4	44	45.4	49.4	26.3					
FH28E-50S-0.5SH(05)	CL580-1815-7-05	50	24.5	29.9	25.57	26.15	27.35	30.7	25.5	27.1	31.7	27	25.5	30.3	20.2	40.4	44	45.4	49.4	31.3					
FH28E-60S-0.5SH(05)	CL580-1834-1-05	60	29.5	34.9	30.57	31.15	32.35	35.7	30.5	32.1	36.7	32	30.5	35.3	26.2	52.4	56	57.4	61.4	36.3					
FH28E-68S-0.5SH(05)	CL580-1841-7-05	68	33.5	38.9	34.57	35.15	36.35	39.7	34.5	36.1	40.7	36	34.5	39.3	26.2	52.4	56	57.4	61.4	40.3					

⑨ : The specification of (07) is applied to FH28E-40S-0.5SH.

HRS DATA REFERENCE

<b>HRS</b>	DRAWING NO. EDC-156370-05-05	PART NO. FH28E-*S-0.5SH(05)
	CODE NO. CL586	CODE NO.