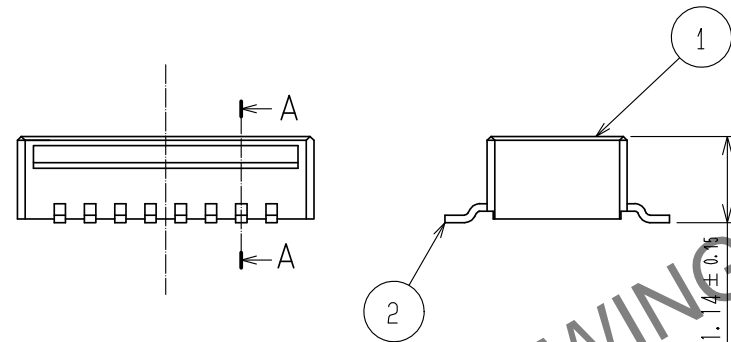
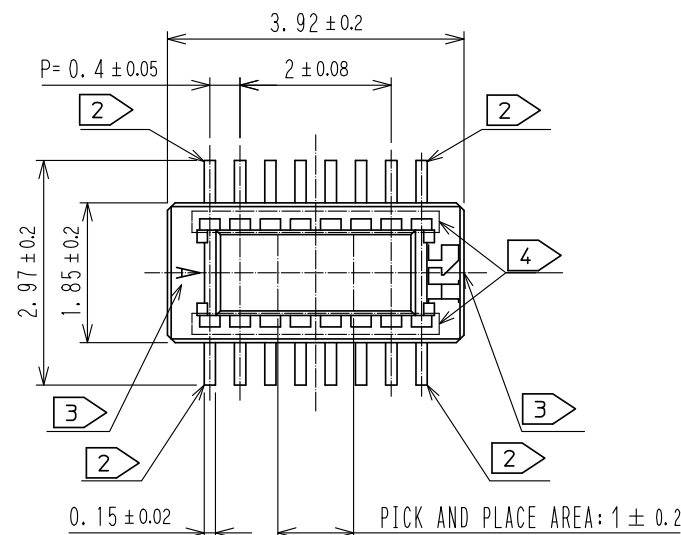
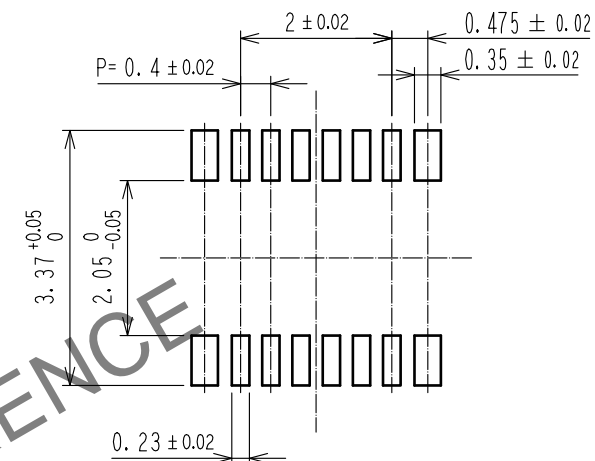


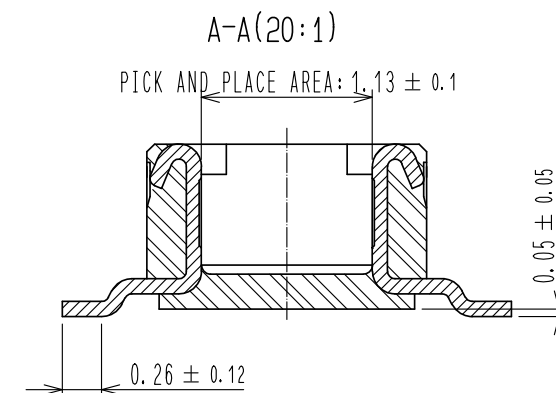
Mar.1.2024 Copyright 2024 HIROSE ELECTRIC CO., LTD. All Rights Reserved.
In case of consideration for using Automotive equipment / device which demand high reliability, kindly contact our sales window correspondents.



RECOMMENDED PATTERN



RECOMMENDED METAL MASK THICKNESS: $120 \mu\text{m}$
RECOMMENDED METAL MASK OPENING RATIO: 80% FOR LEAD PAD



- NOTES)
- ALL LEADS CO-PLANARITY SHALL BE 0.1mm MAX.
 - EACH ONE CONTACT AT 4 CORNERS SHALL BE USED AS METAL HOLD DOWN.
 - HRS MARK AND CAV NO. ARE INDICATED IN APPROX POSITION SHOWN.
 - THERE IS A POSSIBILITY THAT THE RESIN WILL BE EXPOSED AT THIS AREA, BUT THIS WILL NOT AFFECT THE CONTACT RELIABILITY.

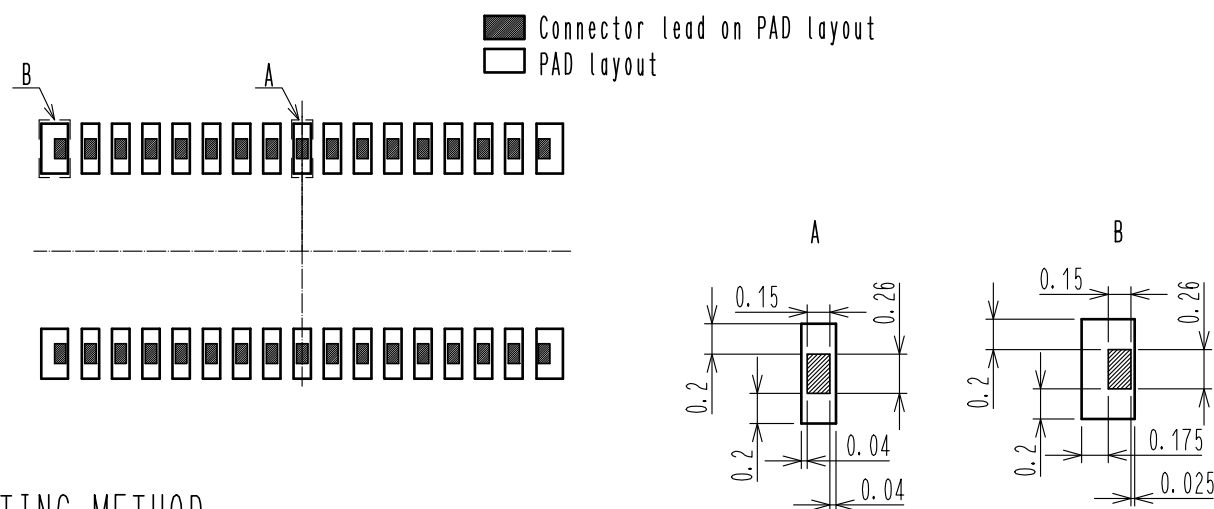
2	PHOSPHOR BRONZE	CONTACT AREA: GOLD $0.05 \mu\text{m}$ MIN	6	PS	CLEAR, REINFORCEMENT COLLAR
		SMT LEAD: GOLD $0.05 \mu\text{m}$ MIN	5	PS	BLACK, PLASTIC REEL
		UNDERPLATING: NICKEL $1 \mu\text{m}$ MIN	4	POLYESTER	CLEAR, COVER TAPE
1	LCP	BLACK, UL94V-0	3	PS	CLEAR, EMBOSSED CARRIER TAPE
NO.	MATERIAL	FINISH, REMARKS	NO.	MATERIAL	FINISH, REMARKS
UNITS mm		SCALE 10 : 1	COUNT 2	DESCRIPTION OF REVISIONS DIS-H-00015007	
HIROSE ELECTRIC CO., LTD.		APPROVED : MO. ISHIDA	20161005	DRAWING NO. EDC-330343-58-01	
		CHECKED : TS. MIYAZAKI	20161005	PART NO. DF40C-12DP-0.4V(58)	
		DESIGNED : SH. HOSODA	20161005	CODE NO. CL0684-4149-9-58	
		DRAWN : SN. NUMAZAKI	20161004		
		DESIGNED	TY. MORISHITA	CHECKED	RT. SHIMIZU
		DATE	20220901		



Mar.1.2024 Copyright 2024 HIROSE ELECTRIC CO., LTD. All Rights Reserved.
In case of consideration for using Automotive equipment / device which demand high reliability, kindly contact our sales window correspondents.

△10. PLEASE REFER TO THE PRODUCT GUIDELINE ETAD-H1015 FOR DETAIL OF CONNECTOR HANDLING.

THE POSITION BETWEEN THE CONNECTOR AND PAD

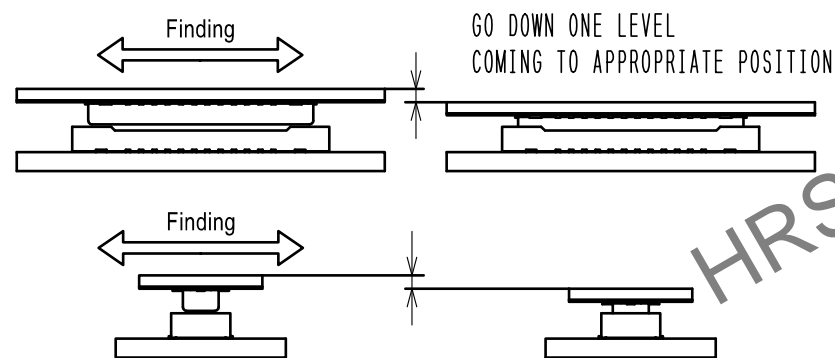


MATING METHOD

PLEASE MATE THE CONNECTOR BY HAND.

MATING PROCEDURE

- (1) FIND THE ALIGNMENT AREA TO THE CONNECTOR IN THE APPROPRIATE MATING POSITION.
THIS CONNECTOR HAS AN ALIGNMENT CHAMBER(GUIDANCE RIBS) ON RECEPTACLE SIDE AND 'R' ON PLUG SIDE,
SO THAT THE CONNECTOR WILL BE SELF-ALIGNED.
WHEN THE CONNECTOR COMES TO THE APPROPRIATE POSITION, THE CONNECTOR GOES INTO THE ALIGNED POSITION.
WHEN ALIGNED, IT CAN BE FELT BY HAND.



- (2) WHEN GUIDING, THE CONNECTORS ARE ALIGNED PARALLEL TO EACH OTHER, WITH LONGITUDINAL AND LATERAL MOVEMENTS RESTRICTED. MATE THEM PROPERLY BY APPLYING FORCE IN THIS CONDITION.

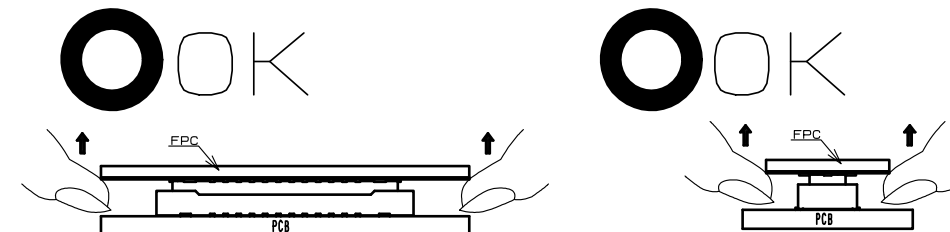


- (3) MAKE SURE THE CONNECTORS ARE MATED CORRECTLY. IF ONE SIDE IS FLOATING OR THE CONNECTORS ARE MATED IN ONE DIRECTION, UN-MATE THEM ONCE, AND THEN MATE THEM AGAIN, FOLLOWING THE PROCEDURES ABOVE FROM THE BEGINNING.

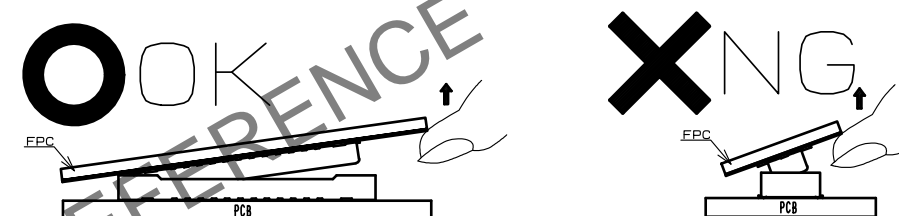
UN-MATING METHOD

PLEASE UN-MATE THE CONNECTOR BY HAND

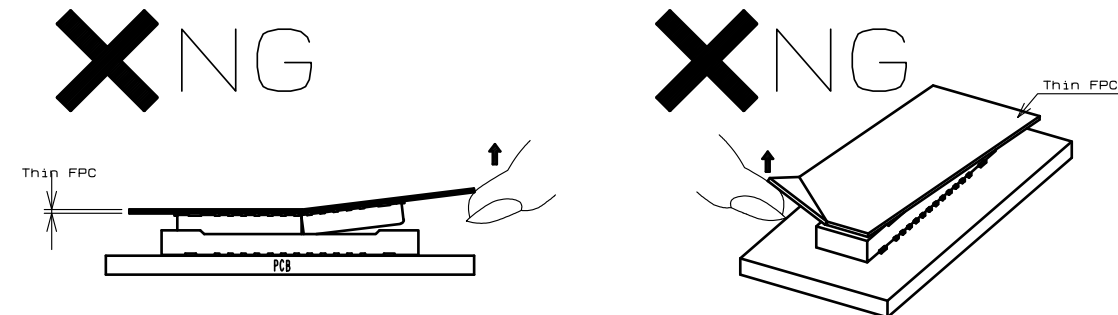
- (1) UN-MATE THE CONNECTORS PARALLEL TO EACH OTHER. HOWEVER, IF THE CONNECTORS HAVE HIGH PIN COUNTS OR THINNER FPC AND STIFFENER, IT BECOMES MORE DIFFICULT TO DO SO.



- (2) IF THE CONNECTOR CANNOT BE UN-MATED PARALLEL IT CAN BE REMOVED DIAGONALLY FROM THE PITCH DIRECTION. BE CAREFUL TO DO SO SINCE THIS ACTION APPLIES STRESS ON THE CONTACT.

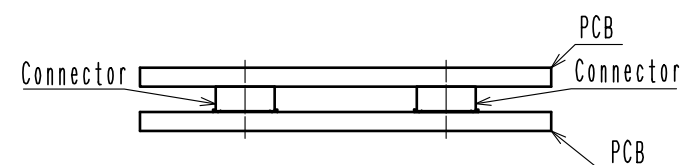


- (3) IF THE FPC IS NOT RIGID, THE CONNECTOR CAN BE BROKEN. PLEASE CHECK THE ACTION OF THE FPC TO BE USED REPEATEDLY AT THE TIME OF TRIAL PRODUCTION. BE CAREFUL TO UN-MATE THEM FROM THE PITCH DIRECTION. PULLING IT FROM THE CORNER CAN ALSO RISK TO PUTTING STRESS ON CONTACTS.

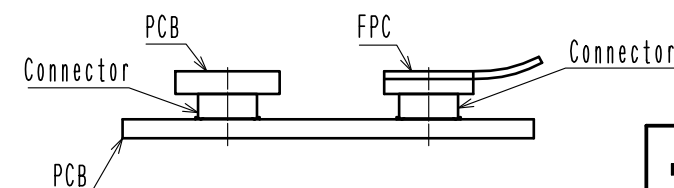


- (4) Caution for using multiple connectors.

Please avoid using more than a single mated pair of connectors between two sandwiched PCBs.
like the picture on the below.
Due to possible misalignment, connector breakage while and after mating may occur.



If using more than a single mated pair, please use divided boards for each connection.



HRS

DRAWING NO.	EDC-330343-58-01
PART NO.	DF40C-12DP-0.4V(58)
CODE NO.	CL0684-4149-9-58

3/3