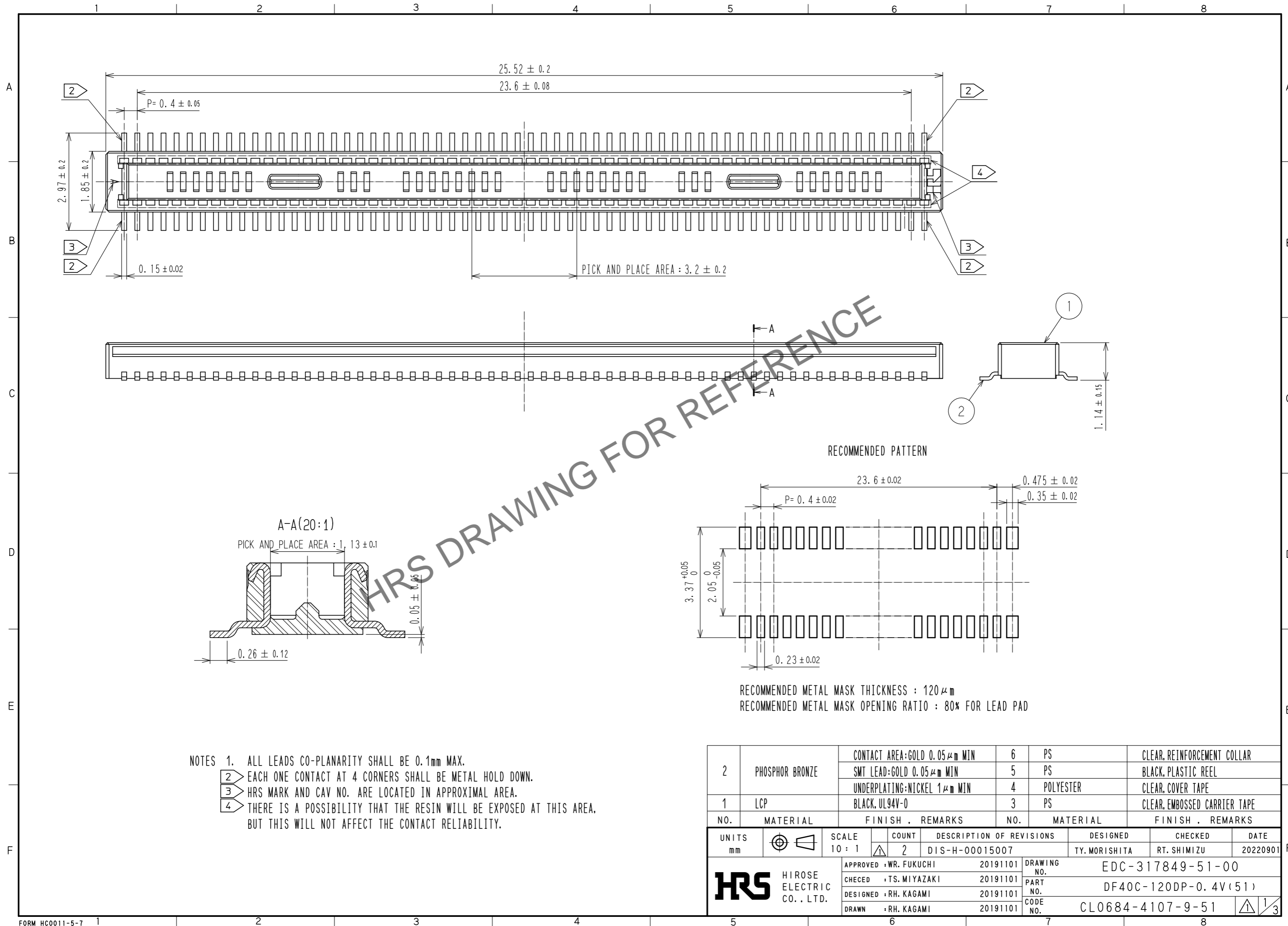


May.1.2024 Copyright 2024 HIROSE ELECTRIC CO., LTD. All Rights Reserved.  
In case of consideration for using Automotive equipment / device which demand high reliability, kindly contact our sales window correspondents.



- NOTES
- 1. ALL LEADS CO-PLANARITY SHALL BE 0.1mm MAX.
  - 2. EACH ONE CONTACT AT 4 CORNERS SHALL BE METAL HOLD DOWN.
  - 3. HRS MARK AND CAV NO. ARE LOCATED IN APPROXIMAL AREA.
  - 4. THERE IS A POSSIBILITY THAT THE RESIN WILL BE EXPOSED AT THIS AREA. BUT THIS WILL NOT AFFECT THE CONTACT RELIABILITY.

NO.	MATERIAL	FINISH	REMARKS	NO.	MATERIAL	FINISH	REMARKS
2	PHOSPHOR BRONZE	CONTACT AREA:GOLD 0.05μm MIN	6	PS	CLEAR, REINFORCEMENT COLLAR		
		SMT LEAD:GOLD 0.05μm MIN	5	PS	BLACK, PLASTIC REEL		
		UNDERPLATING:NICKEL 1μm MIN	4	POLYESTER	CLEAR, COVER TAPE		
1	LCP	BLACK, UL94V-0	3	PS	CLEAR, EMBOSSED CARRIER TAPE		

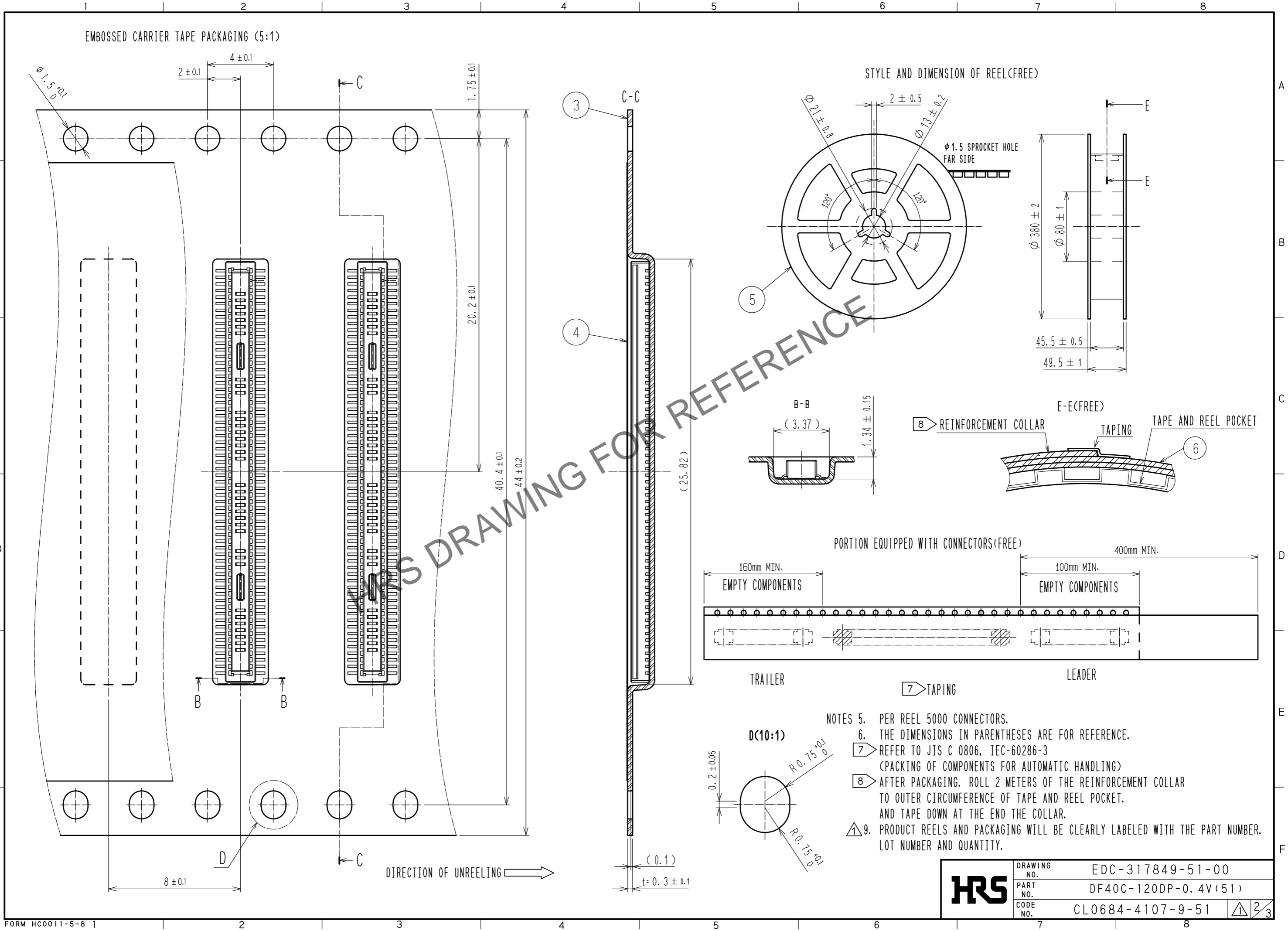
  

UNITS	SCALE	COUNT	DESCRIPTION OF REVISIONS	DESIGNED	CHECKED	DATE
mm	10:1	2	DIS-H-00015007	TY. MORISHITA	RT. SHIMIZU	20220901

APPROVED	CHECED	DESIGNED	DRAWN	DATE	DRAWING NO.	PART NO.	CODE NO.
WR. FUKUCHI	TS. MIYAZAKI	RH. KAGAMI	RH. KAGAMI	20191101	EDC-317849-51-00	DF40C-120DP-0.4V(51)	CL0684-4107-9-51

May.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.

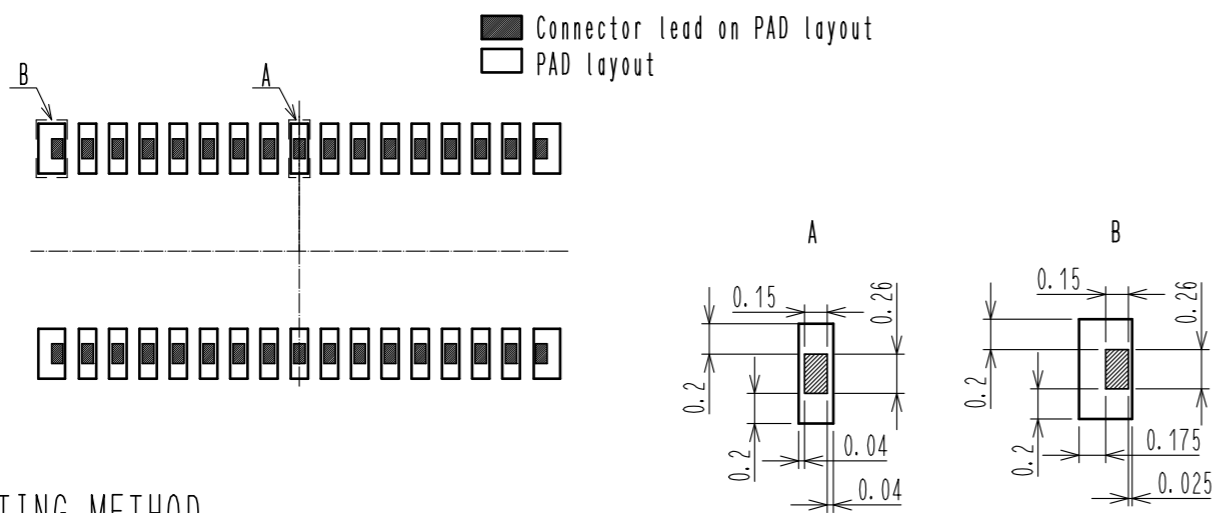


<b>HRS</b>	DRAWING NO.	EDC-317849-51-00
	PART NO.	DF40C-120DP-0.4V(51)
	CODE NO.	CL0684-4107-9-51
		2/3

May.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

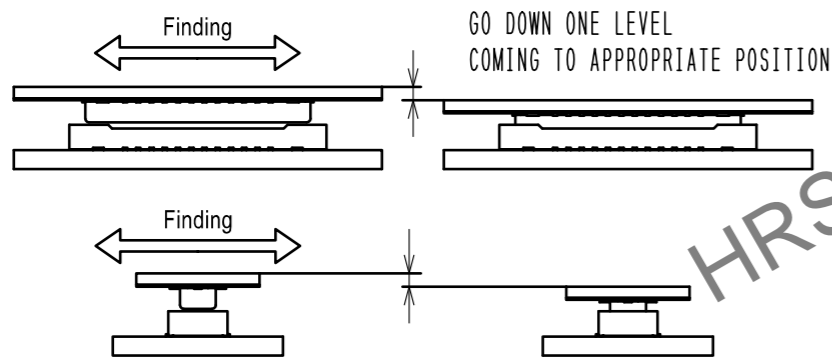


**MATING METHOD**

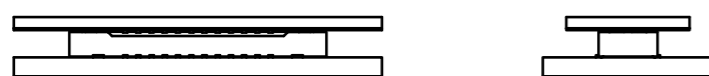
PLEASE MATE THE CONNECTOR BY HAND.

**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.

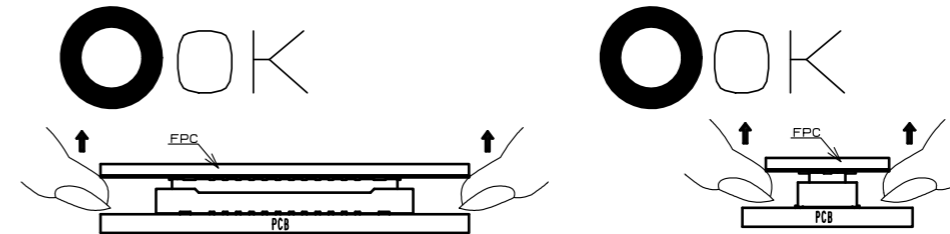


- (3) MAKE SURE THE CONNECTORS ARE MATED CORRECTLY. IF ONE SIDE IS FLOATING OR THE CONNECTORS ARE MATED IN ONE DIRECTION, UN-MATE THEM ONCE, AND THEN MATE THEM AGAIN, FOLLOWING THE PROCEDURES ABOVE FROM THE BEGINNING.

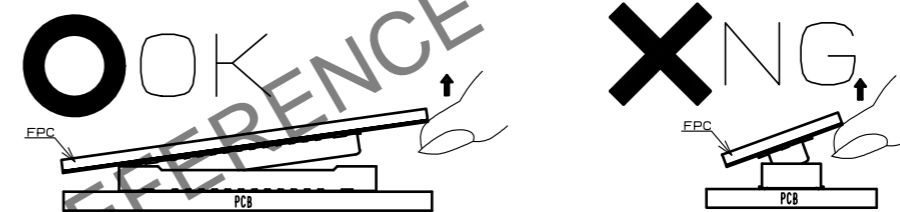
**UN-MATING METHOD**

PLEASE UN-MATE THE CONNECTOR BY HAND

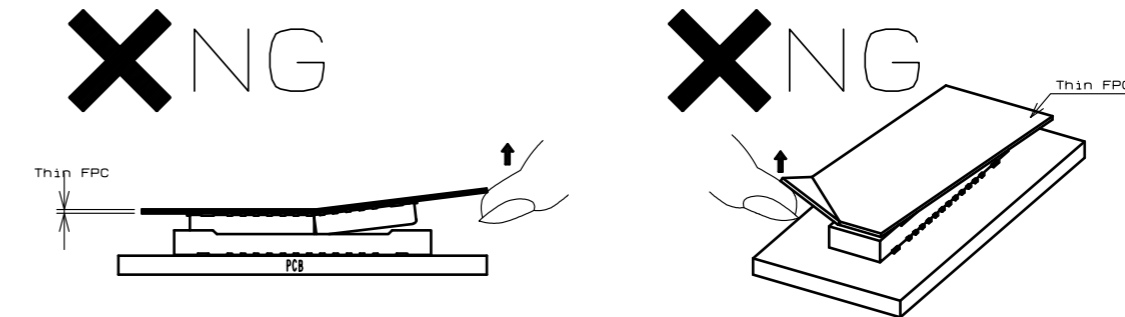
- (1) UN-MATE THE CONNECTORS PARALLEL TO EACH OTHER. HOWEVER, IF THE CONNECTORS HAVE HIGH PIN COUNTS OR THINNER FPC AND STIFFENER, IT BECOMES MORE DIFFICULT TO DO SO.



- (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.

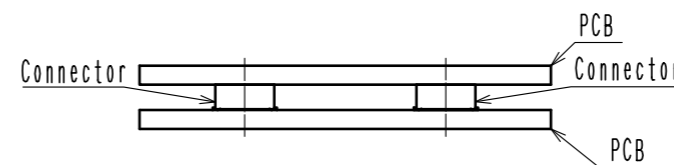


- (3) IF THE FPC IS NOT RIGID, THE CONNECTOR CAN BE BROKEN. PLEASE CHECK THE ACTION OF THE FPC TO BE USED REPEATEDLY AT THE TIME OF TRIAL PRODUCTION. BE CAREFUL TO UN-MATE THEM FROM THE PITCH DIRECTION, PULLING IT FROM THE CORNER CAN ALSO RISK TO PUTTING STRESS ON CONTACTS.

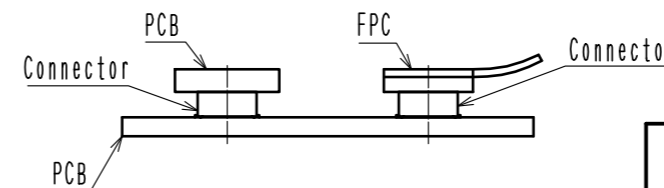


- (4) Caution for using multiple connectors.

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.



<b>HRS</b>	DRAWING NO.	EDC-317849-51-00
	PART NO.	DF40C-120DP-0.4V(51)
	CODE NO.	CL0684-4107-9-51
		△ 3/3