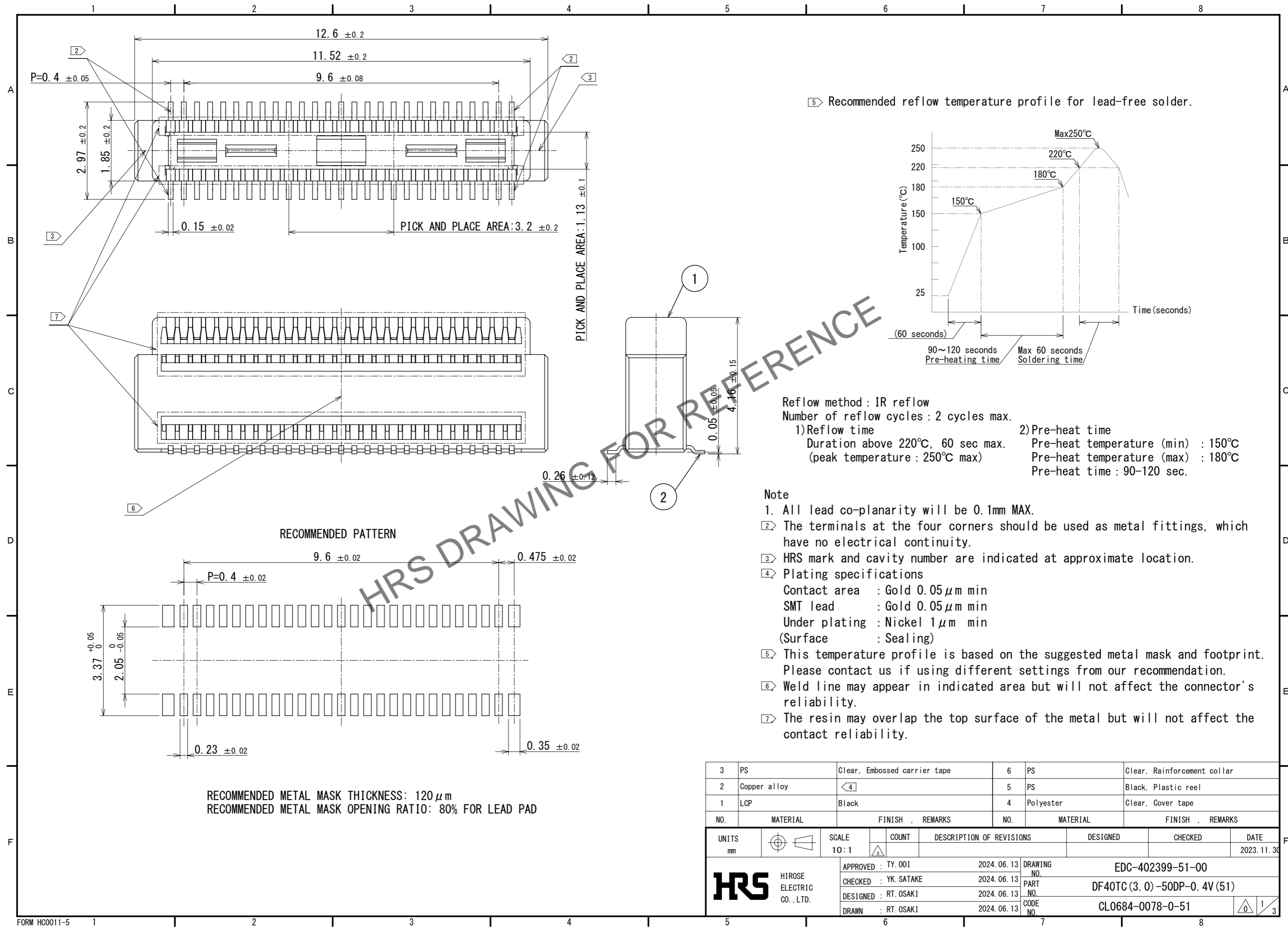
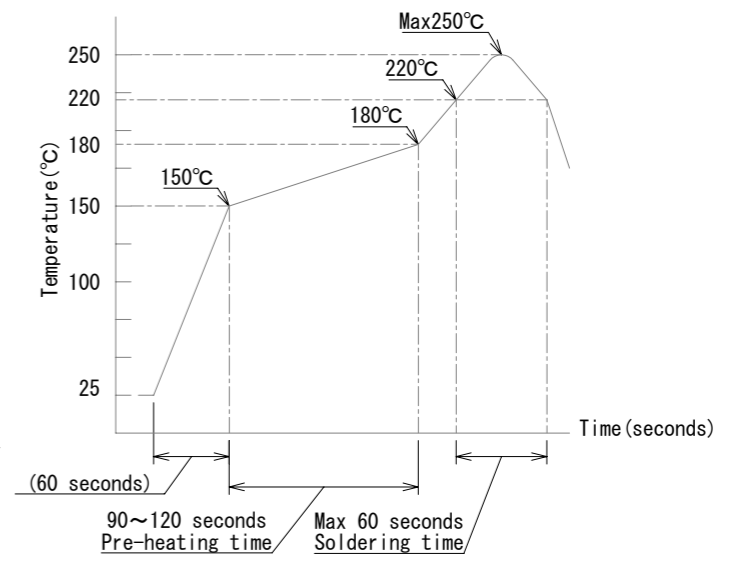


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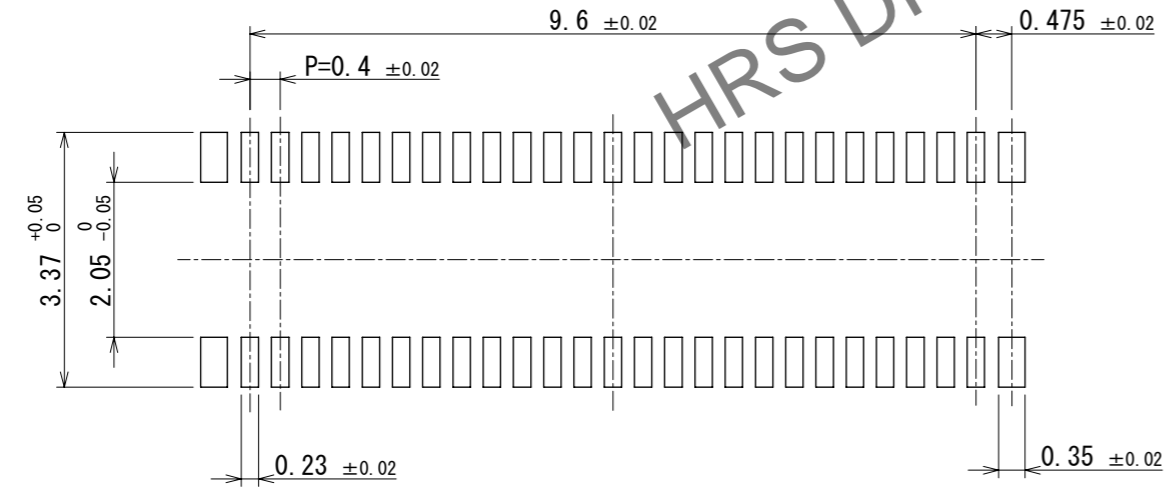
5 Recommended reflow temperature profile for lead-free solder.



Reflow method : IR reflow  
 Number of reflow cycles : 2 cycles max.  
 1) Reflow time  
 Duration above 220°C, 60 sec max.  
 (peak temperature : 250°C max)  
 2) Pre-heat time  
 Pre-heat temperature (min) : 150°C  
 Pre-heat temperature (max) : 180°C  
 Pre-heat time : 90~120 sec.

- Note
- 1. All lead co-planarity will be 0.1mm MAX.
  - 2 The terminals at the four corners should be used as metal fittings, which have no electrical continuity.
  - 3 HRS mark and cavity number are indicated at approximate location.
  - 4 Plating specifications  
 Contact area : Gold 0.05 μm min  
 SMT lead : Gold 0.05 μm min  
 Under plating : Nickel 1 μm min  
 (Surface : Sealing)
  - 5 This temperature profile is based on the suggested metal mask and footprint. Please contact us if using different settings from our recommendation.
  - 6 Weld line may appear in indicated area but will not affect the connector's reliability.
  - 7 The resin may overlap the top surface of the metal but will not affect the contact reliability.

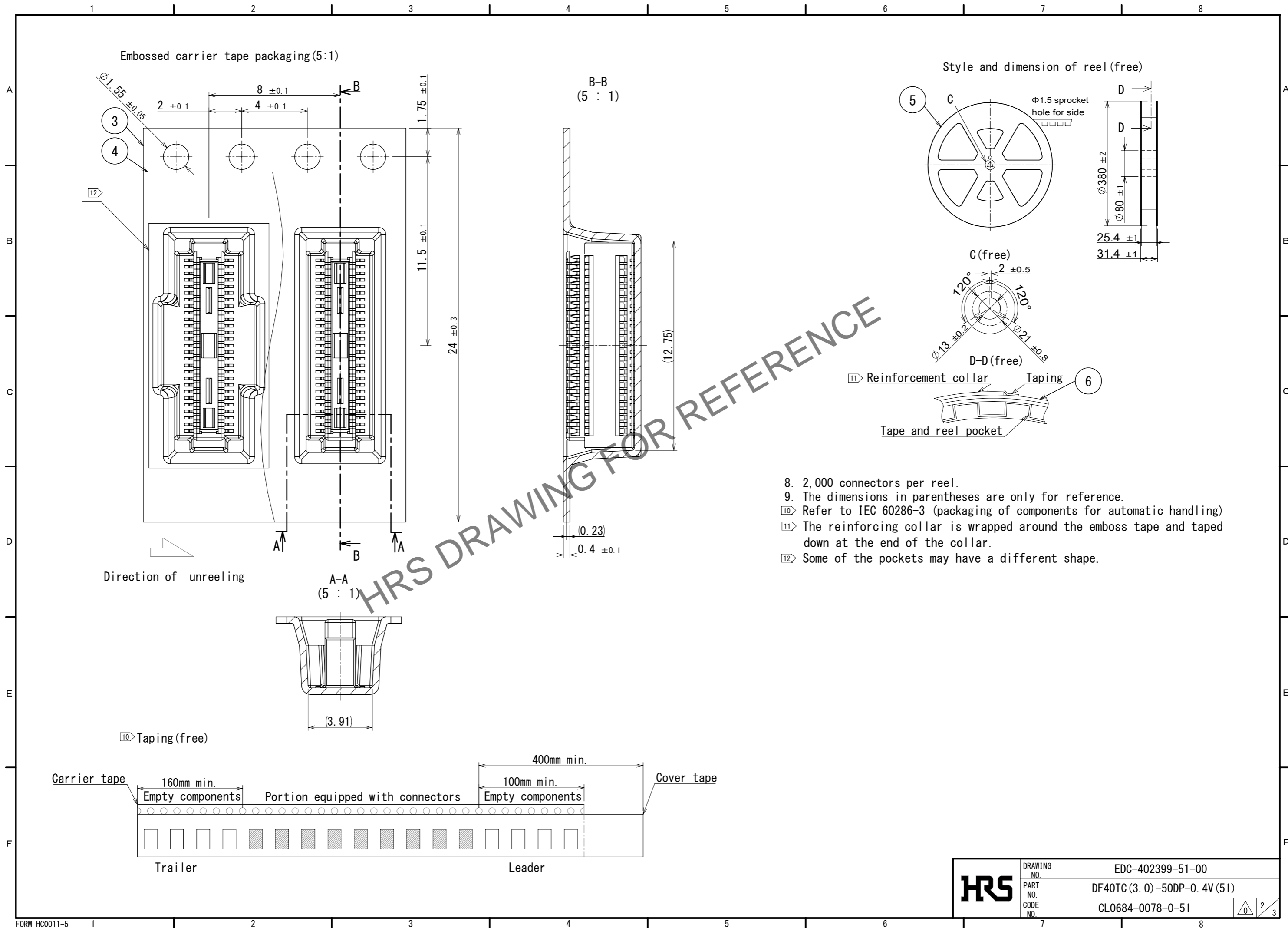
RECOMMENDED PATTERN



RECOMMENDED METAL MASK THICKNESS: 120 μm  
 RECOMMENDED METAL MASK OPENING RATIO: 80% FOR LEAD PAD

3	PS	Clear, Embossed carrier tape	6	PS	Clear, Reinforcement collar
2	Copper alloy	4	5	PS	Black, Plastic reel
1	LCP	Black	4	Polyester	Clear, Cover tape
NO.	MATERIAL	FINISH, REMARKS	NO.	MATERIAL	FINISH, REMARKS
UNITS		SCALE	COUNT	DESCRIPTION OF REVISIONS	
mm		10:1	△	DESIGNED	CHECKED
HRS		APPROVED : TY.001	2024.06.13	DRAWING NO. EDC-402399-51-00	
HIROSE ELECTRIC CO., LTD.		CHECKED : YK. SATAKE	2024.06.13	PART NO. DF40TC (3.0) -50DP-0.4V (51)	
		DESIGNED : RT. OSAKI	2024.06.13	CODE NO. CL0684-0078-0-51	
		DRAWN : RT. OSAKI	2024.06.13	DATE 2023.11.30	

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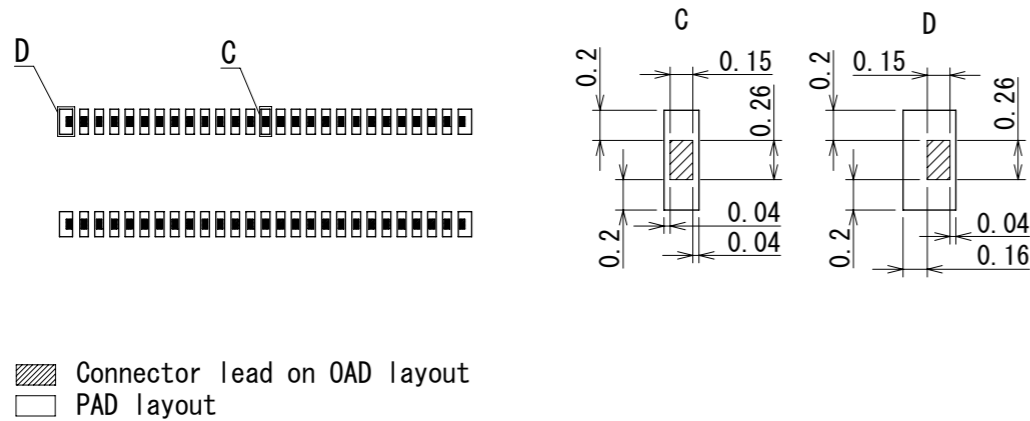
- 8. 2,000 connectors per reel.
- 9. The dimensions in parentheses are only for reference.
- 10. Refer to IEC 60286-3 (packaging of components for automatic handling)
- 11. The reinforcing collar is wrapped around the emboss tape and taped down at the end of the collar.
- 12. Some of the pockets may have a different shape.

<b>HRS</b>	DRAWING NO.	EDC-402399-51-00
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13. Please refer to the product guideline ETAD-H1015 for detail of connector handling.

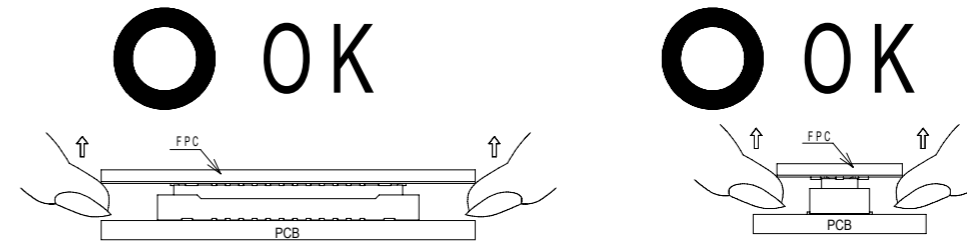
The position between the connector and PAD



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.

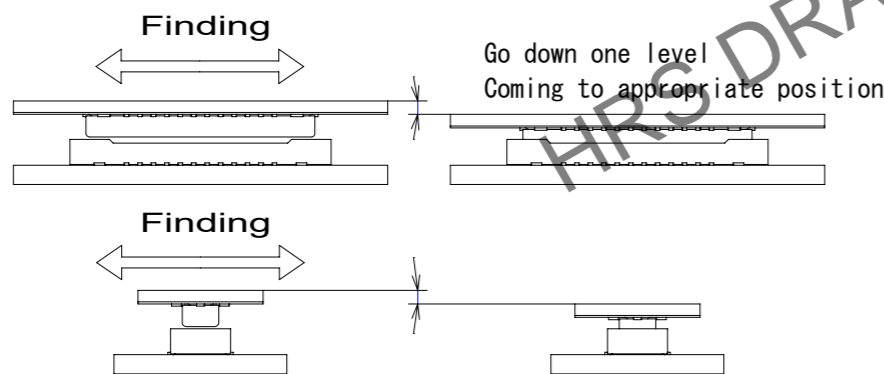


Mating method

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.

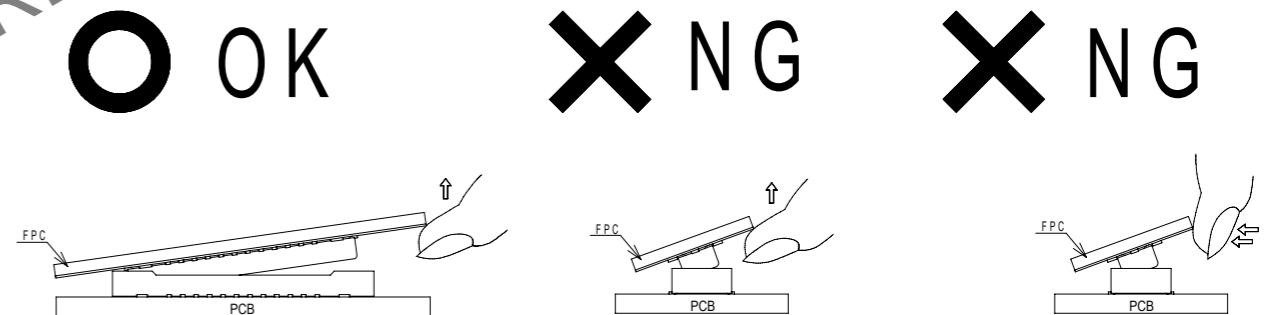


- (2) When guiding, the connectors are aligned parallel to each other, with longitudinal and lateral movements restricted. Mate them properly by applying force in this condition.

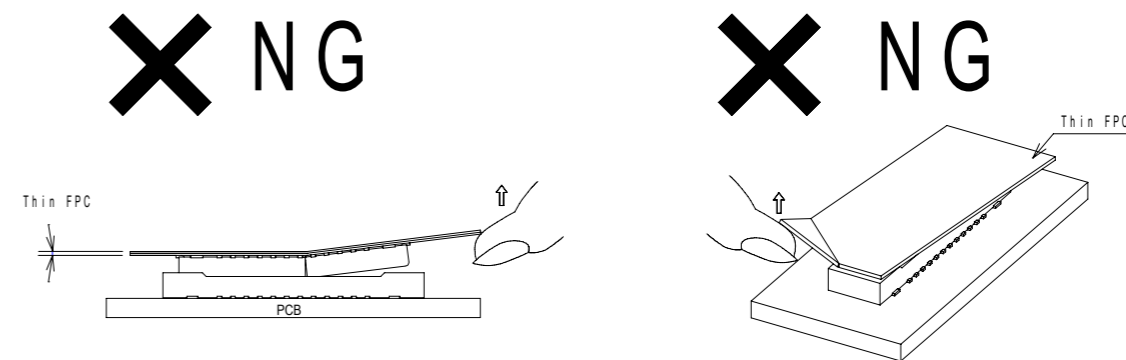


- (3) Make sure the connectors are mated correctly. If one side is floating or the connectors are mated in one direction, un-mate them once, and then mate them again, following the procedures above from the beginning.

- (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.



<b>HRS</b>	DRAWING NO.	EDC-402399-51-00
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