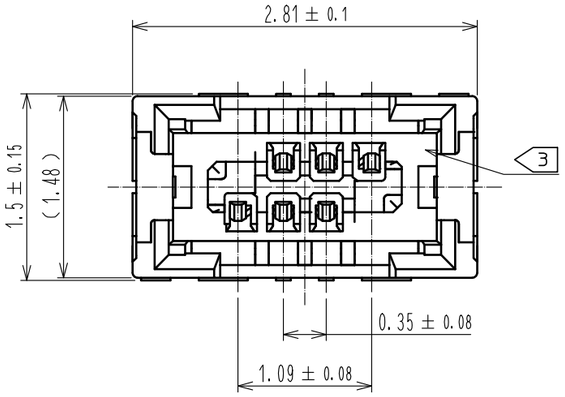
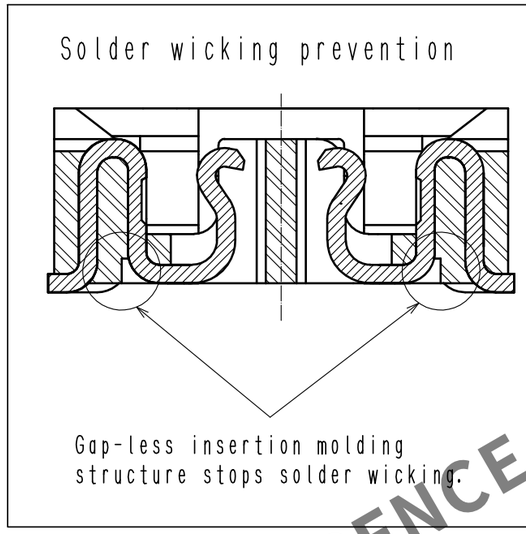
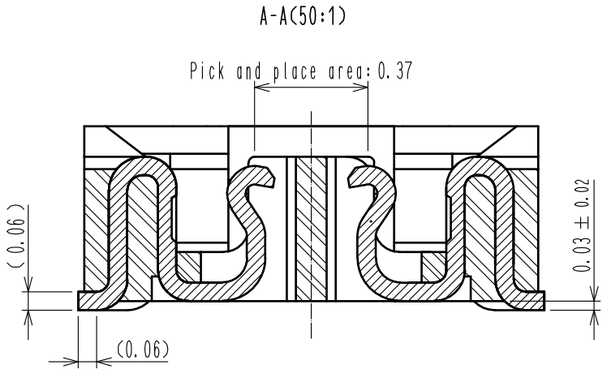
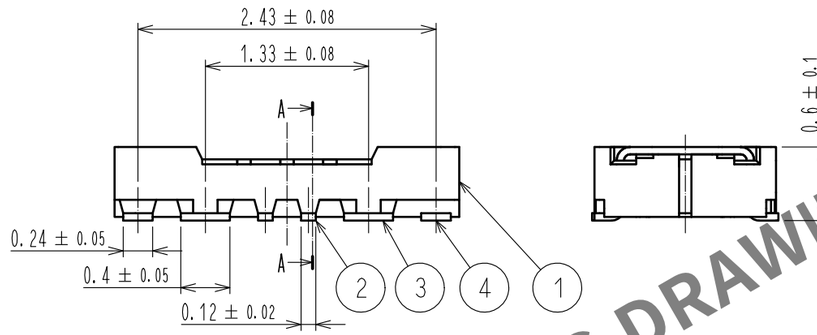
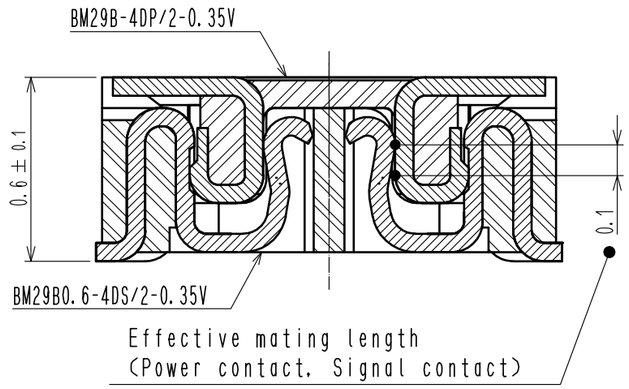
Mar.1.2024 Copyright 2024 HIROSE ELECTRIC CO., LTD. All Rights Reserved.
In case of consideration for using Automotive equipment / device which demand high reliability, kindly contact our sales window correspondents.











HRS DRAWING FOR REFERENCE

△2 NOTE 1. All lead co-planarity will be 0.08mm MAX.
〈2〉. Contact plating specifications
Contact area : Gold 0.05μm MIN
SMT lead : Gold 0.05μm MIN
Under plating : Nickel 1μm MIN
(Surface : Sealing)
〈3〉. Cavity number is indicated at approximate location.

NO.	MATERIAL	FINISH . REMARKS	NO.	MATERIAL	FINISH . REMARKS
4	PHOSPHOR BRONZE	〈2〉	8	PS	CLEAR. REINFORCEMENT COLLAR
3	PHOSPHOR BRONZE	〈2〉	7	PS	BLACK. PLASTIC REEL
2	PHOSPHOR BRONZE	〈2〉	6	POLYESTER	CLEAR. COVER TAPE
1	LCP	UL94 V-0. BLACK	5	PS	SMOKE GRAY. EMBOSSED CARRIER TAPE

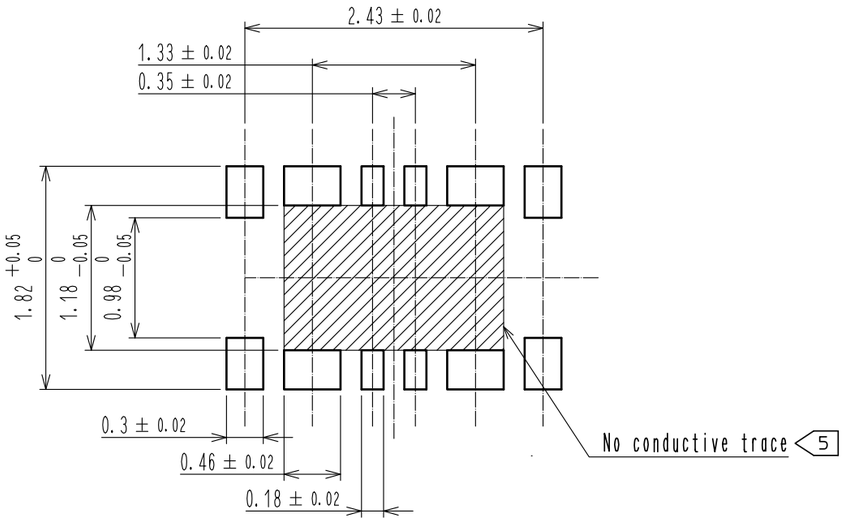
UNITS	SCALE		COUNT	DESCRIPTION OF REVISIONS	DESIGNED	CHECKED	DATE
mm	20 : 1	△2	1	DIS-H-00019138	RT. OSAKI	RT. SHIMIZU	20230915

HIROSE ELECTRIC CO., LTD.

APPROVED	WR. FUKUCHI	20210423	DRAWING NO. EDC-386724-53-01
CHECKED	TS. MIYAZAKI	20210423	PART NO. BM29B0.6-4DS/2-0.35V(53)
DESIGNED	RT. OSAKI	20210423	CODE NO. CL0673-7063-0-53 △2 1/4
DRAWN	RT. OSAKI	20210423	

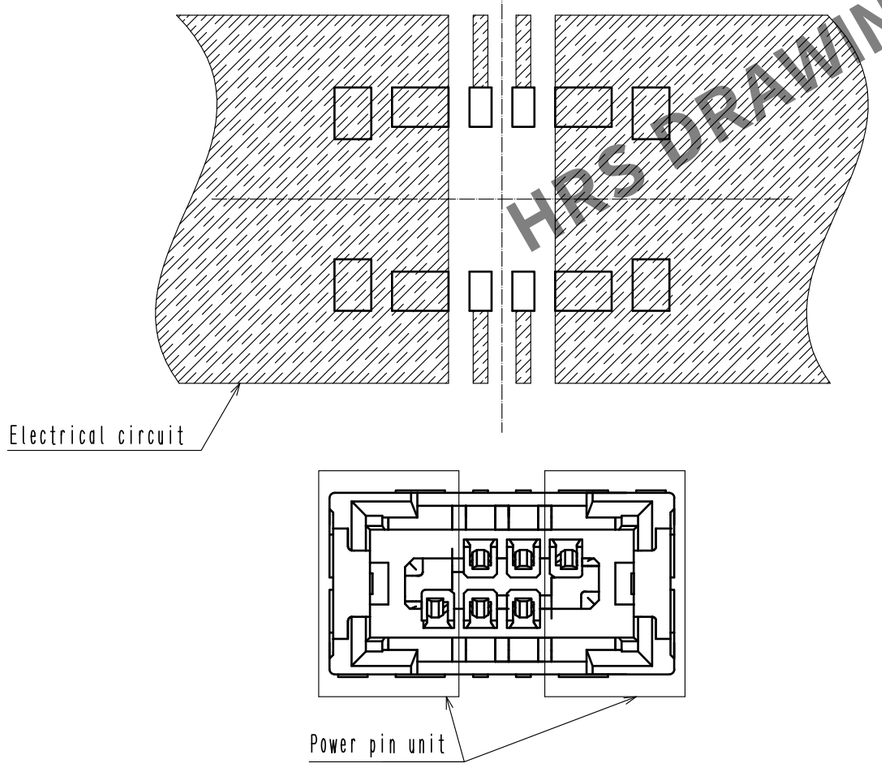
Mar.1.2024 Copyright 2024 HIROSE ELECTRIC CO., LTD. All Rights Reserved.
In case of consideration for using Automotive equipment / device which demand high reliability, kindly contact our sales window correspondents.

◆Recommended PCB layout

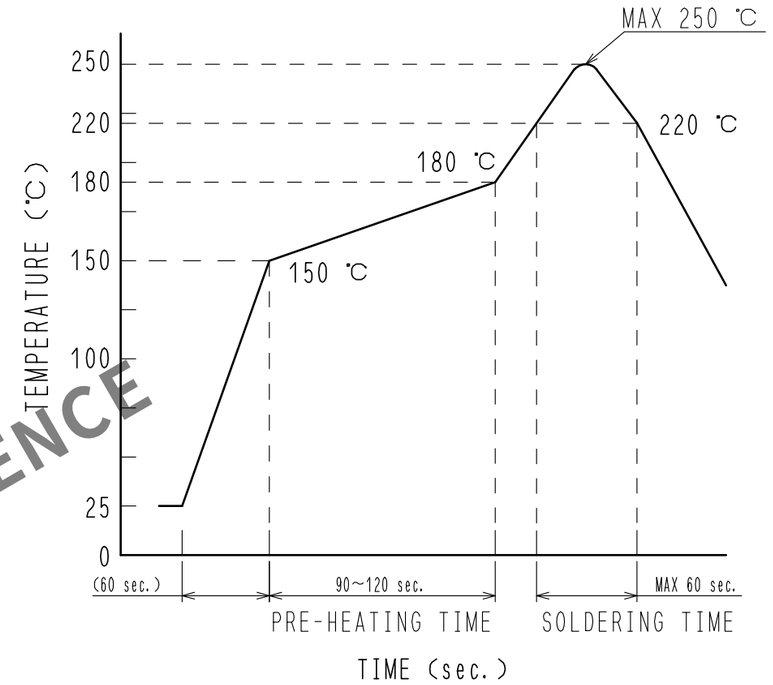


◆Recommended metal mask dimensions
Metal mask thickness : 80μm
(Open ratio : 100% for PCB layout)

◆Recommended electrical circuit layout



4 Recommended reflow temperature profile using lead-free solder paste.



Reflow method:IR reflow
Number of reflow cycles:2 cycles MAX.
1)Reflow time
Duration above 220℃, 60 sec MAX.
(Peak temperature:250℃ MAX)
2)Pre-heat time
Pre-heat temperature(MIN):150℃
Pre-heat temperature(MAX):180℃
Pre-heat time:90-120 sec.

4. This temperature profile is based on the suggested metal mask and footprint. Please contact us if using different settings from our recommendation.
5. For the routing on the indicated PCB surface, apply solder resist in order for the insulation treatment.

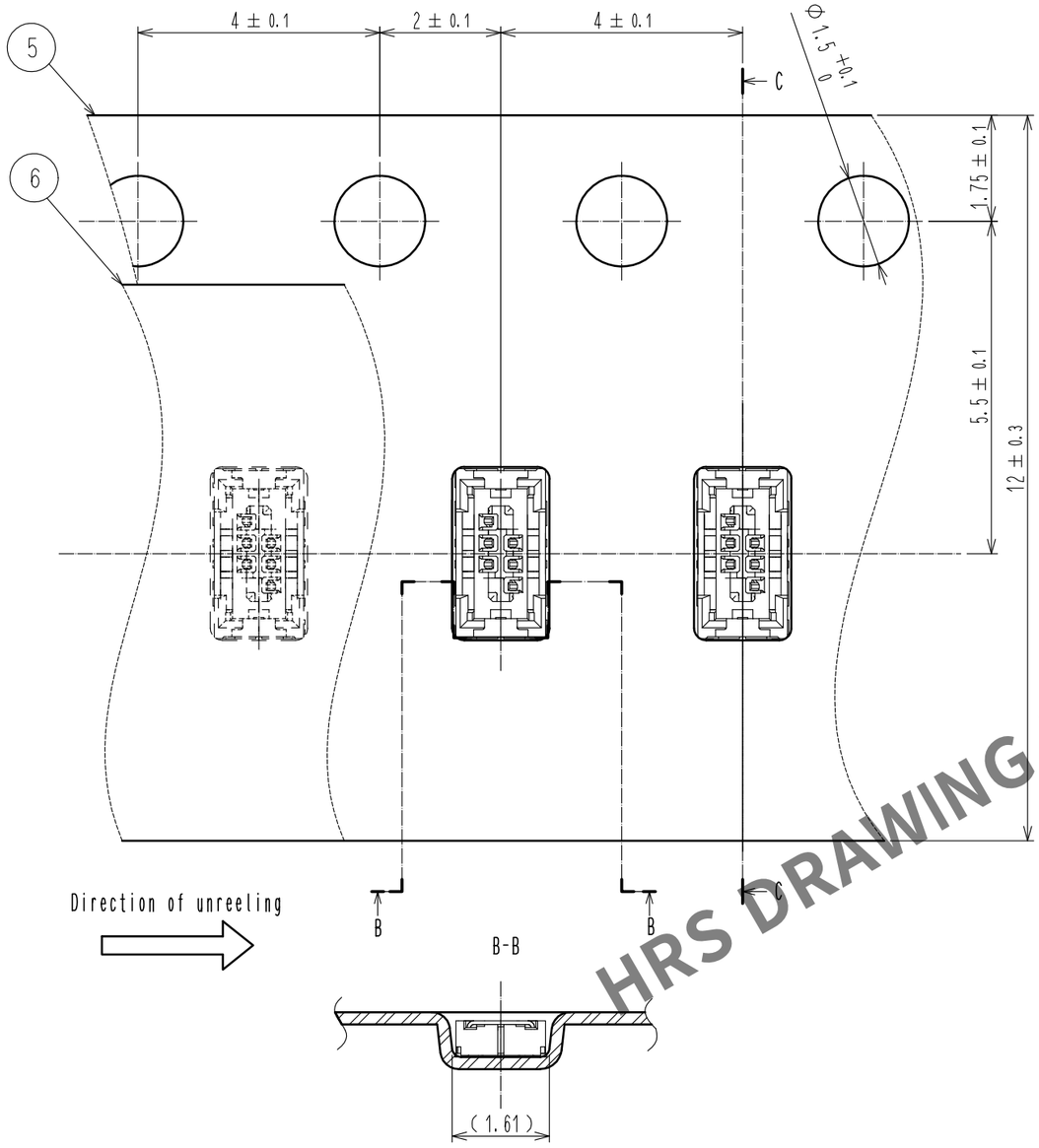
HRS DRAWING FOR REFERENCE

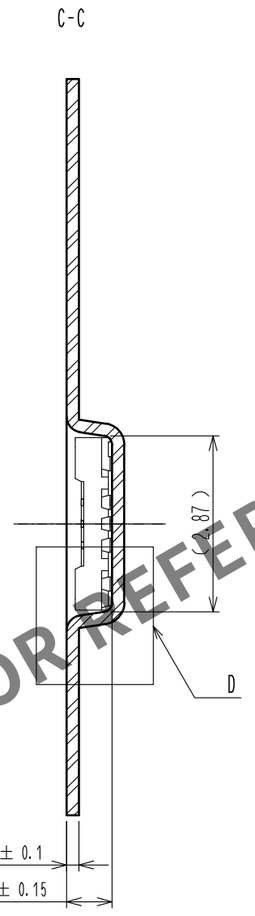
DRAWING NO.	EDC-386724-53-01
PART NO.	BM29B0.6-4DS/2-0.35V(53)
CODE NO.	CL0673-7063-0-53

△2 2/4

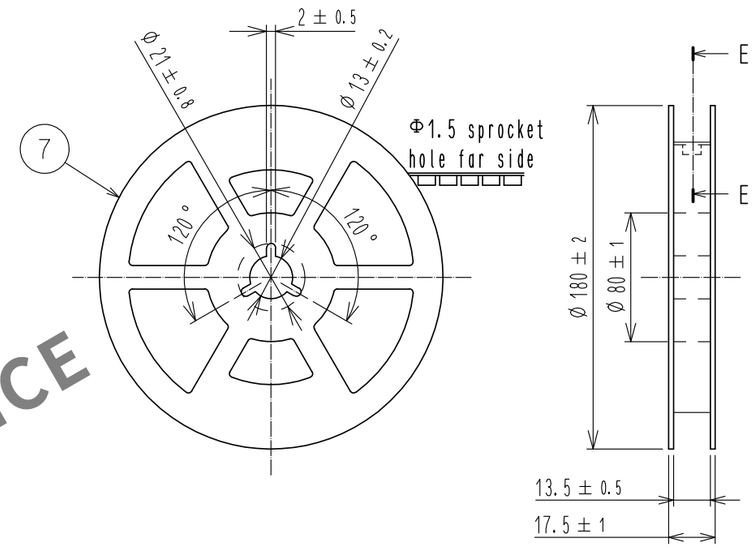
Mar.1.2024 Copyright 2024 HIROSE ELECTRIC CO., LTD. All Rights Reserved.
In case of consideration for using Automotive equipment / device which demand high reliability, kindly contact our sales window correspondents.

Embossed carrier tape packaging (10:1)

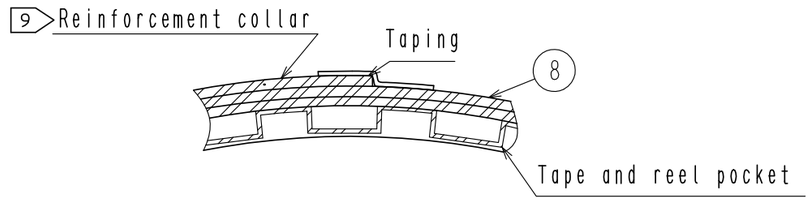


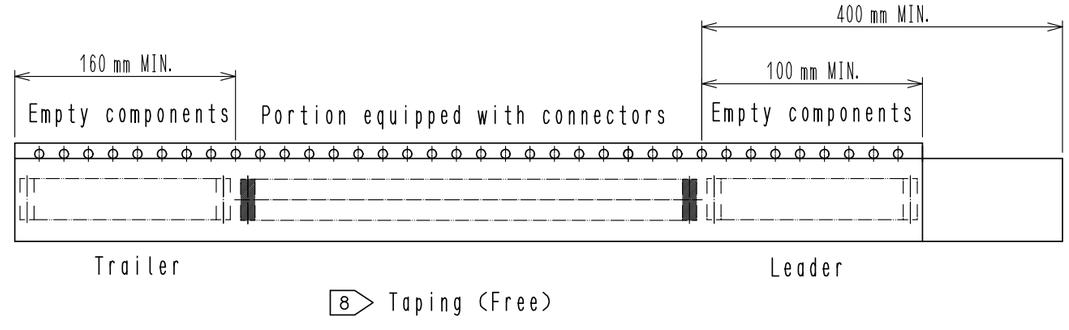


Style and dimension of reel (Free)

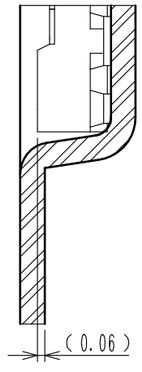


E-E (Free)





D(20:1)



6 . 1,000 connectors per reel.
7 . The dimensions in parentheses are only for reference.
8 . Refer to IEC 60286-3 (packaging of components for automatic handling)
9 . The reinforcing collar is wrapped around the emboss tape and taped down at the end of the collar.

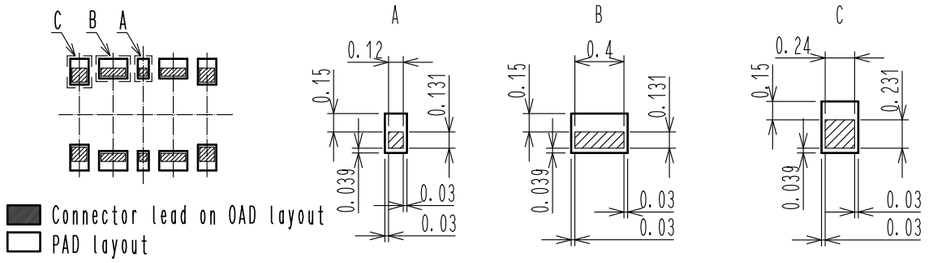
HRS DRAWING FOR REFERENCE

DRAWING NO.	EDC-386724-53-01
PART NO.	BM29B0.6-4DS/2-0.35V(53)
CODE NO.	CL0673-7063-0-53

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.

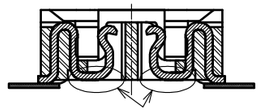
10. Please refer to the product guideline ETAD-H1016 for detail of connector handling.

The position between the connector and PAD



Caution for soldering

There is metal exposure area bottom of the connector.
To avoid solder wicking from the bottom side, please design PCB PAD and stencil with recommended dimensions.

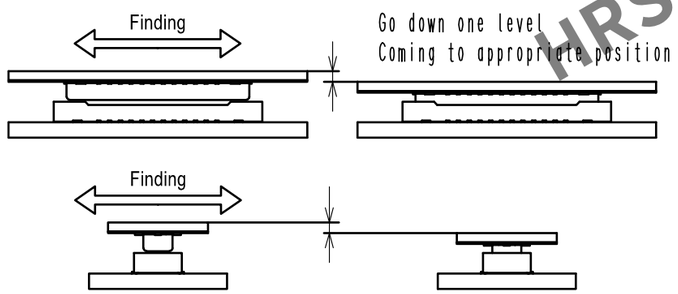


Mating method

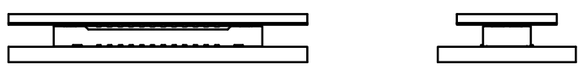
Please mate the connector by hand.

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.

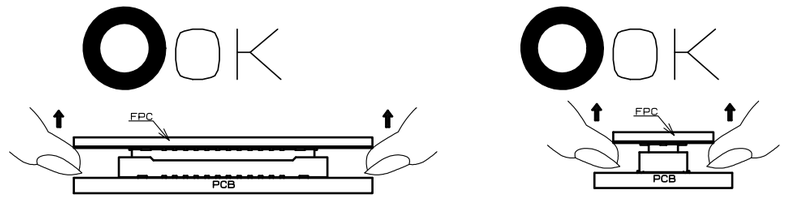


(3) Make sure the connectors are mated correctly. If one side is floating or the connectors are mated in one direction, un-mate them once, and then mate them again, following the procedures above from the beginning.

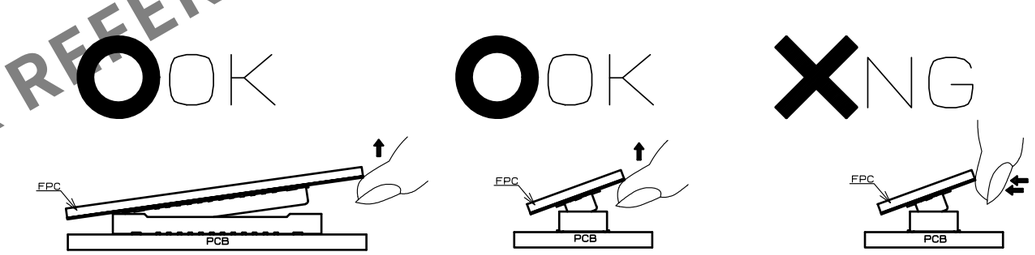
Un-mating method

Please un-mate the connector by hand

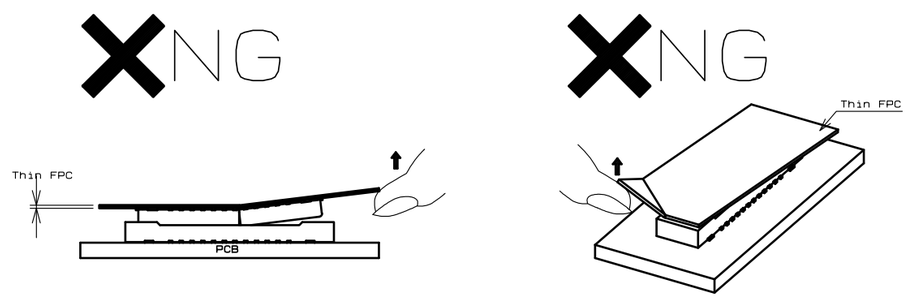
(1) Un-mate the connectors parallel to each other. However, if the connectors have high pin counts or thinner FPC and stiffener, it becomes more difficult to do so.



(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.



HRS DRAWING FOR REFERENCE

HRS	DRAWING NO.	EDC-386724-53-01
	PART NO.	BM29B0.6-4DS/2-0.35V(53)
	CODE NO.	CL0673-7063-0-53