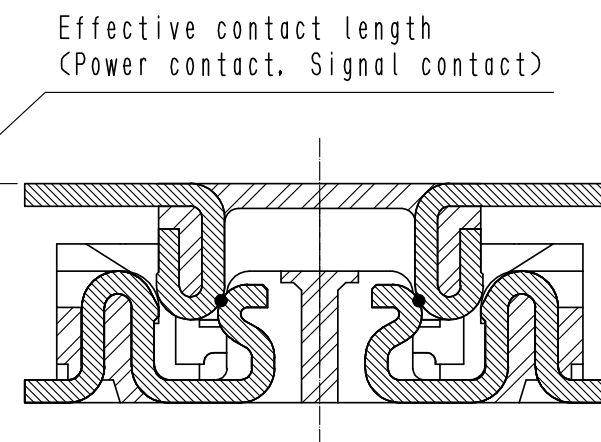
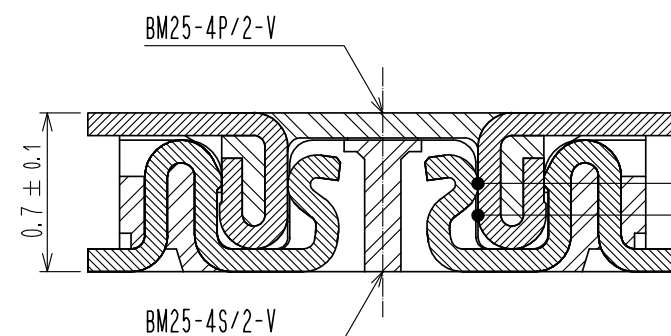
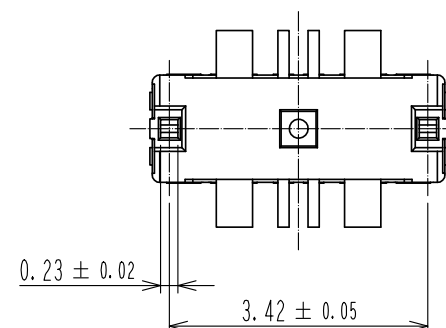
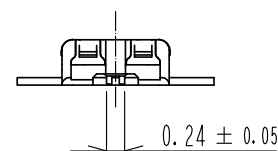
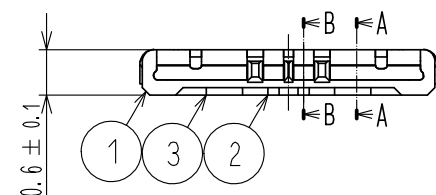
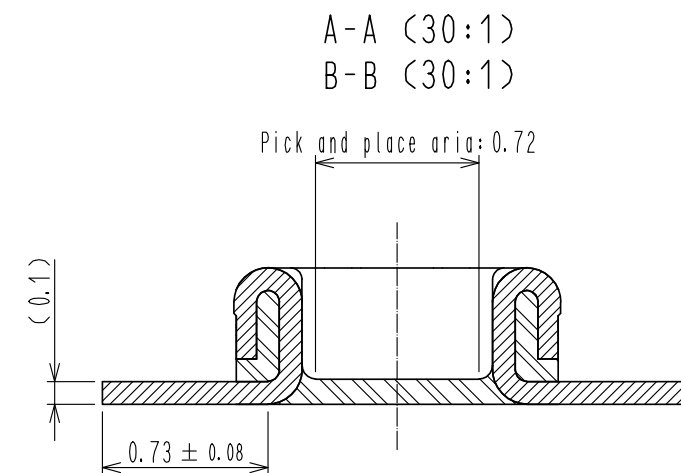
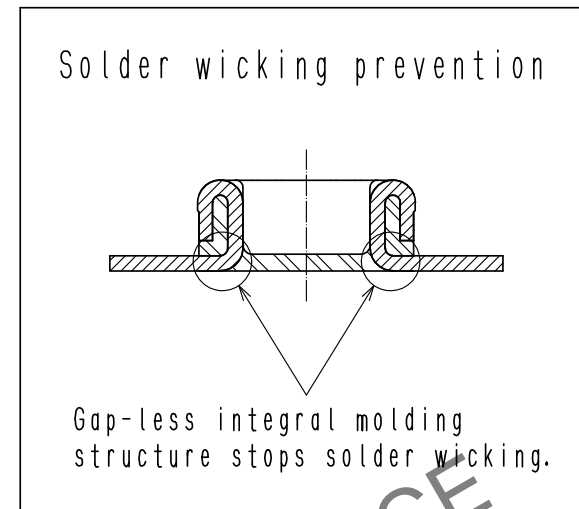
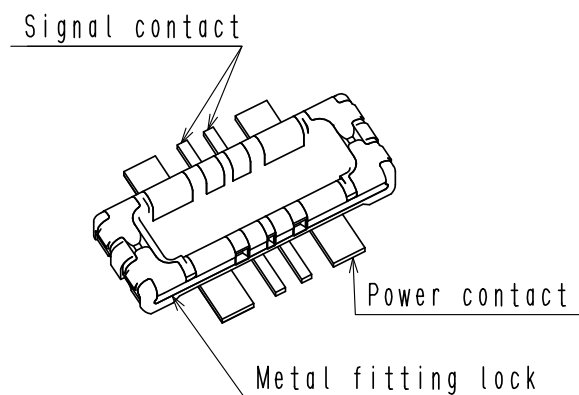
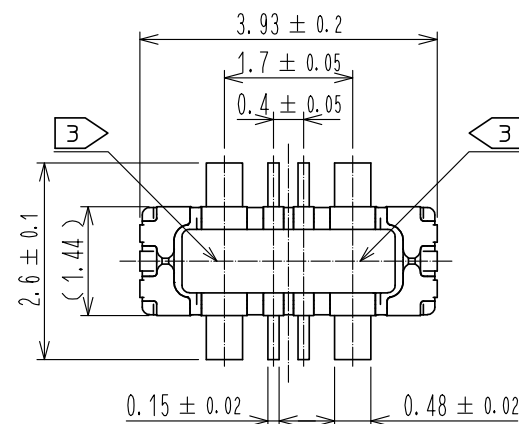


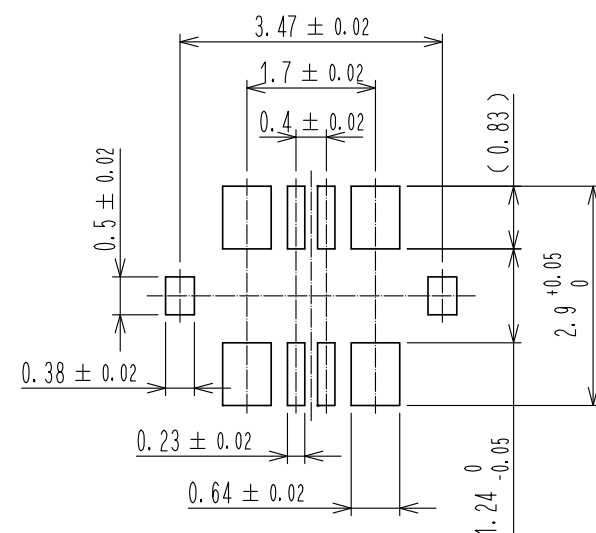
Dec.1.2025 Copyright 2025 HIROSE ELECTRIC CO., LTD. All Rights Reserved.
In case of consideration for using Automotive equipment / device which demand high reliability, kindly contact our sales window correspondents.



- NOTE 1 . All lead co-planarity shall 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 . HRS mark and CAV No. are indicated in approx. position shown.

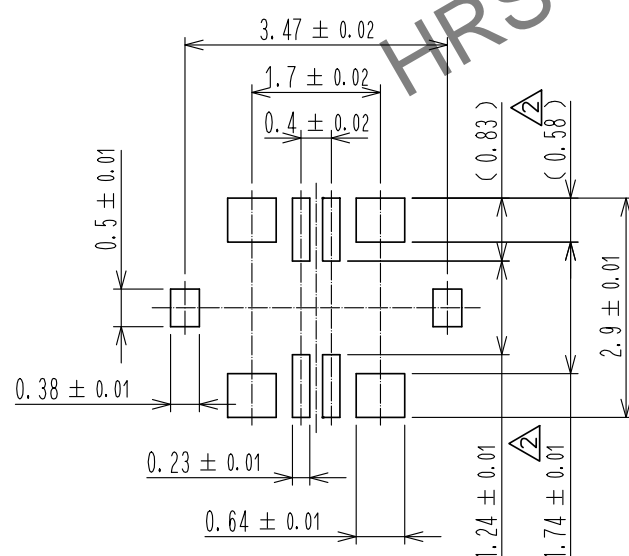
			7	PS	CLEAR. REINFORCEMENT COLLAR
			6	PS	BLACK. PLASTIC REEL
			5	POLYESTER	CLEAR. COVER TAPE
			4	PS	CLEAR. EMBOSSED CARRIER TAPE
NO.	MATERIAL	FINISH . REMARKS	NO.	MATERIAL	FINISH . REMARKS
UNITS mm		SCALE 10 : 1	COUNT 3	DESCRIPTION OF REVISIONS DIS-H-00001203	
		APPROVED : MO. ISHIDA	15.03.26	DESIGNED TR. YUNOKI	CHECKED TS. MIYAZAKI
		CHECKED : YH. MICHIDA	15.03.26	DATE 15.12.22	
		DESIGNED : TR. YUNOKI	15.03.26	DRAWING NO. EDC-358234-53-01	
		DRAWN : KR. AJITO	15.03.26	PART NO. BM25-4P/2-V(53)	
				CODE NO. CL677-1201-2-53	1/4

◆ Recommended PCB layout

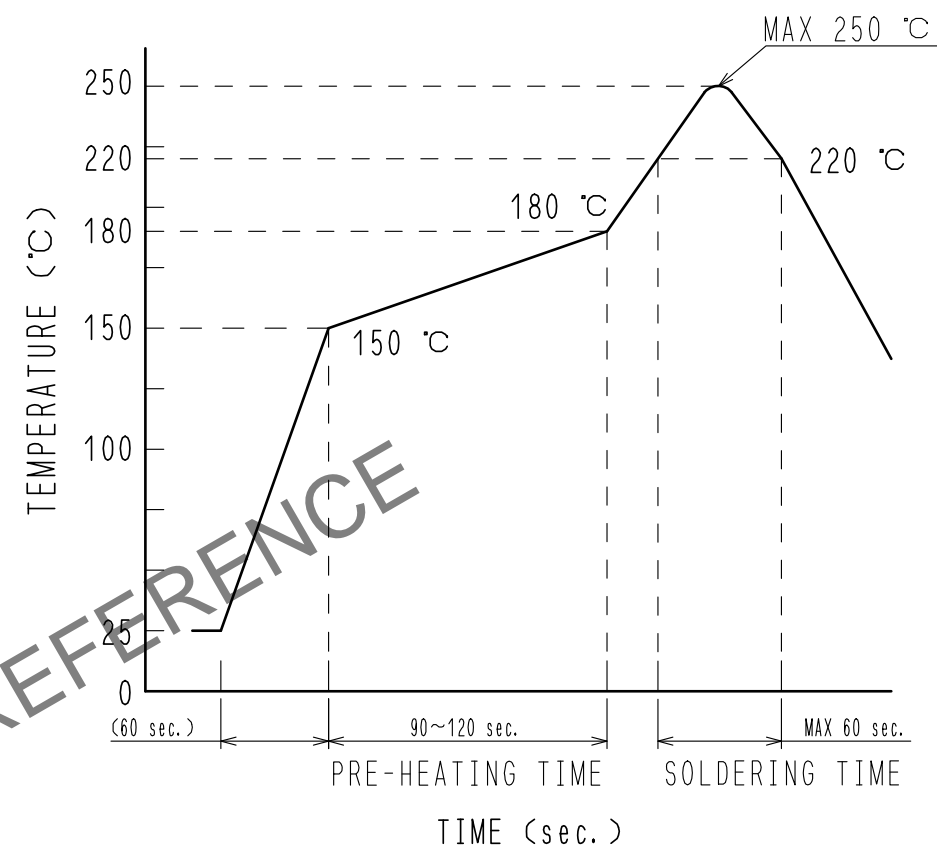


◆ Recommended metal mask dimensions

Metal mask thickness : $100 \mu\text{m}$



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°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.

- 4 The temperatures mentioned above refer to the PCB surface temperature near the connector leads. The temperature profiles are based on the above conditions. In individual applications the actual temperature may vary, depending on solder paste type, volume/thickness and board size/thickness. Consult your solder paste and equipment manufacturer for specific recommendations.
- 5 Please contact us in case you will make different settings from our recommendation.

HRS

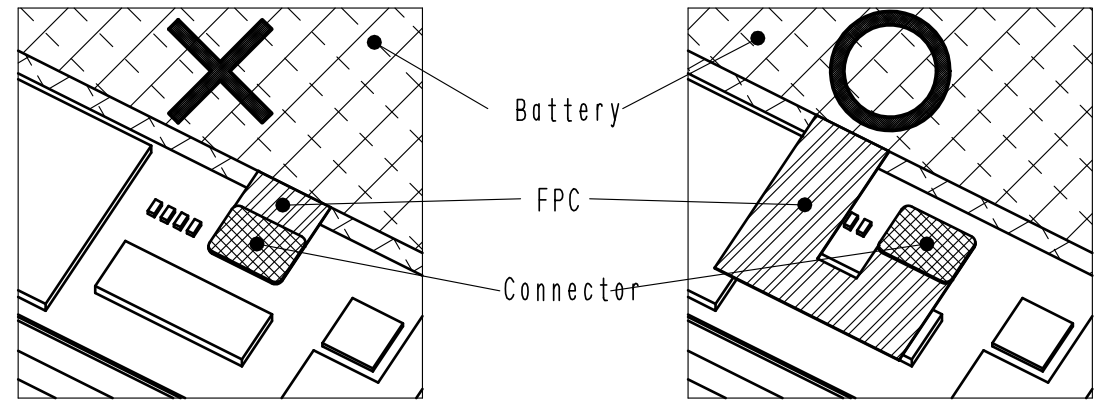
DRAWING NO.	EDC-358234-53-01
PART NO.	BM25-4P/2-V(53)
CODE NO.	CL677-1201-2-53

2/4

Dec.1.2025 Copyright 2025 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.

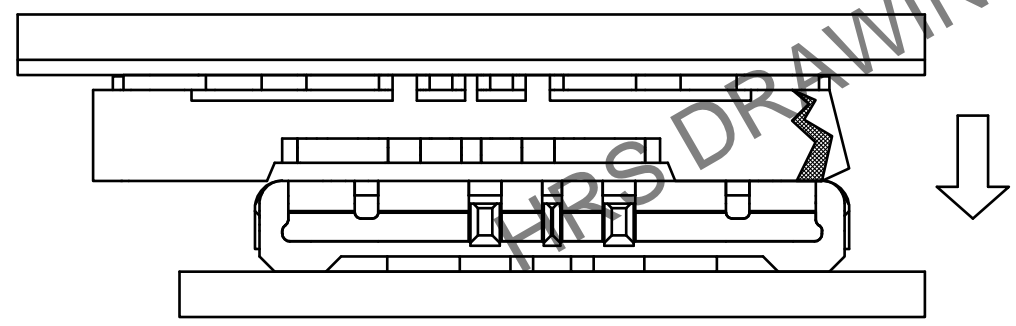
How to draw the FPC

BM25 series connector is intended to carry 10A electrical current for battery application.
FPC may have less flexibility than usual, since the copper foil becomes wider and thicker to carry current of 10A.
Please design the FPC to have a flexibility to absorb the displacement* of the connector cased by fixing PCB and battery.

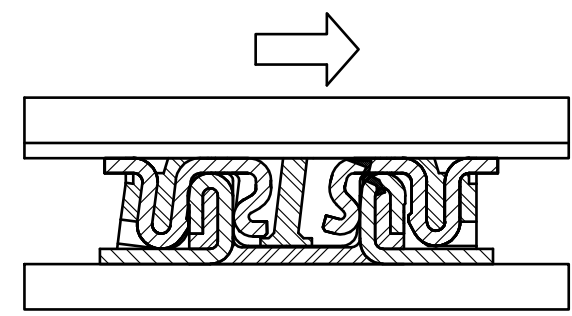


*Possible problems caused by connector mating in incorrect positioning.
Mating the connector in incorrect positioning could lose the function of the connector.

① Insulator could be broken.



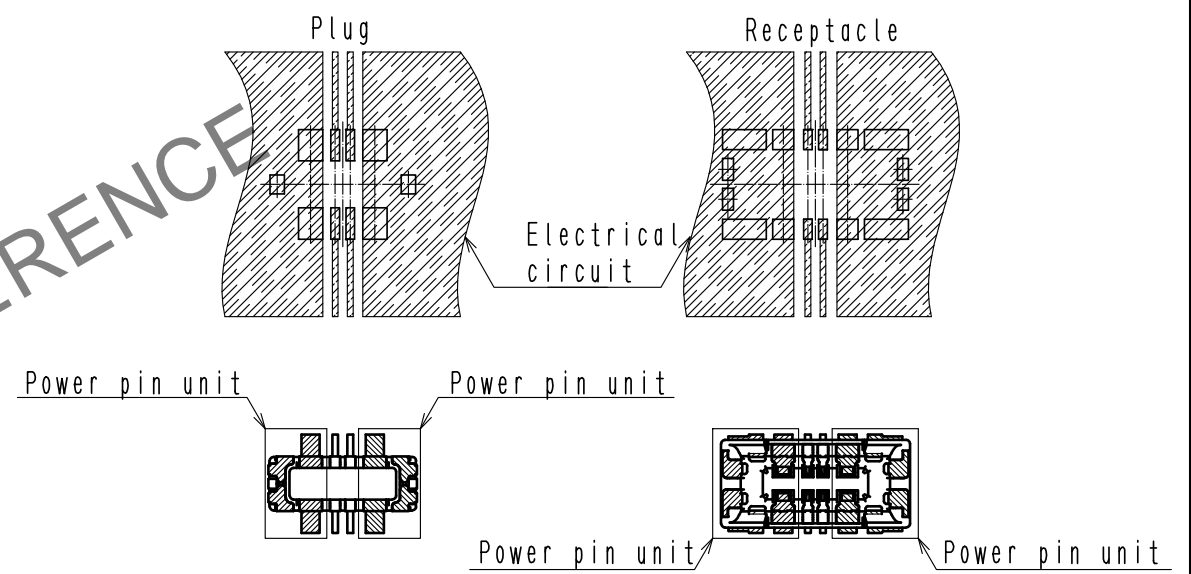
② It could apply excessive mechanical stress to single side of the contact.



How to draw the electrical circuit

As shown in the figure below , each power supply unit including the lock metal fitting has to be mounted on the same PCB circuit.

Recommended electrical circuit layout



HRS	DRAWING NO.	EDC-358234-53-01	2/4
	PART NO.	BM25-4P/2-V(53)	
	CODE NO.	CL677-1201-2-53	