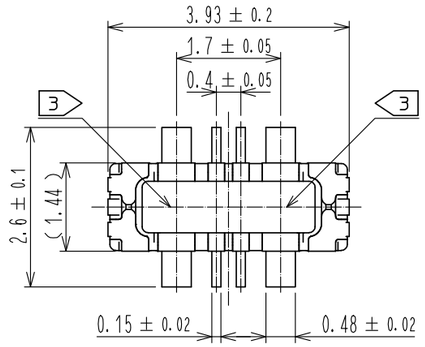
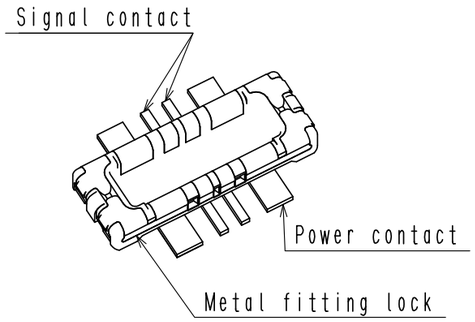
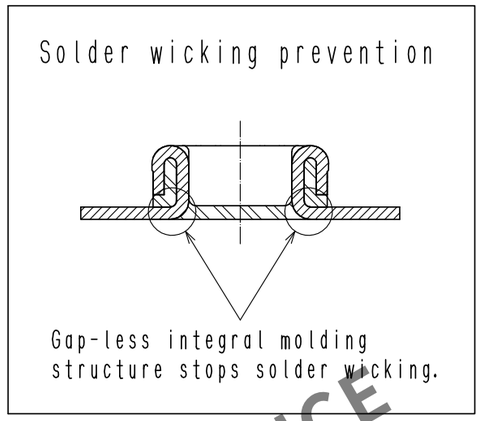
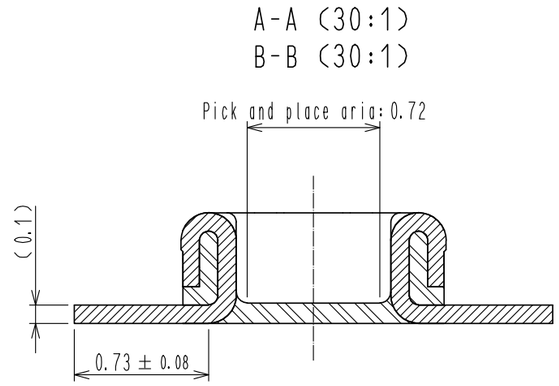
Feb.1.2024 Copyright 2024 HIROSE ELECTRIC CO., LTD. All Rights Reserved.
In case of consideration for using Automotive equipment / device which demand high reliability, kindly contact our sales window correspondents.

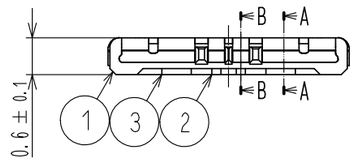
HRS DRAWING FOR REFERENCE

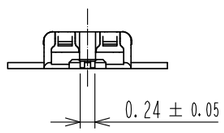


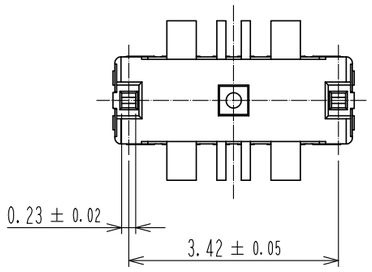


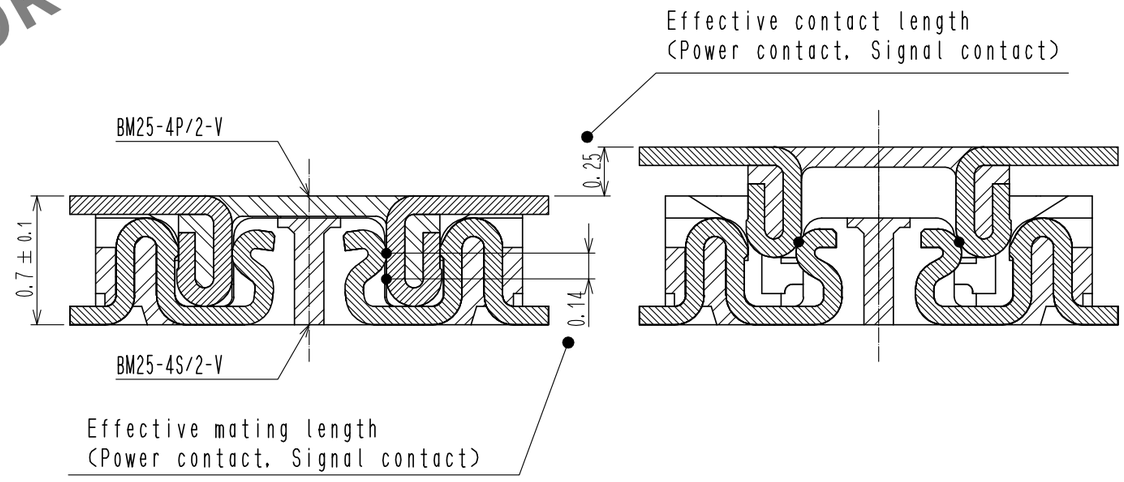












NOTE 1. All lead co-planarity shall be 0.08mm MAX.
2. Contact plating specifications
Contact area : Gold 0.05μm MIN
SMT lead : Gold 0.05μm MIN
Under plating : Nickel 1μm MIN
(Surface : Sealing)
3. HRS mark and CAV No. are indicated in approx. position shown.

NO.	MATERIAL	FINISH . REMARKS	NO.	MATERIAL	FINISH . REMARKS
3	COPPER ALLOY	2	7	PS	CLEAR. REINFORCEMENT COLLAR
2	COPPER ALLOY	2	6	PS	BLACK. PLASTIC REEL
1	LCP	UL94 V-0. BLACK	5	POLYESTER	CLEAR. COVER TAPE
			4	PS	CLEAR. EMBOSSED CARRIER TAPE

UNITS	SCALE		COUNT	DESCRIPTION OF REVISIONS	DESIGNED	CHECKED	DATE
mm	10 : 1	2	3	DIS-H-00001203	TR. YUNOKI	TS. MIYAZAKI	15. 12. 22

HIROSE ELECTRIC CO., LTD.

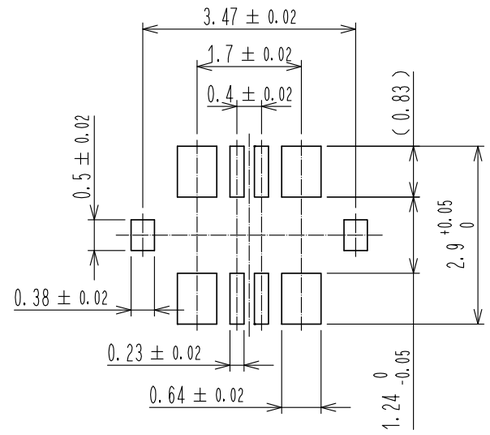
APPROVED	MO. ISHIDA	15. 03. 26
CHECKED	YH. MICHIDA	15. 03. 26
DESIGNED	TR. YUNOKI	15. 03. 26
DRAWN	KR. AJITO	15. 03. 26

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

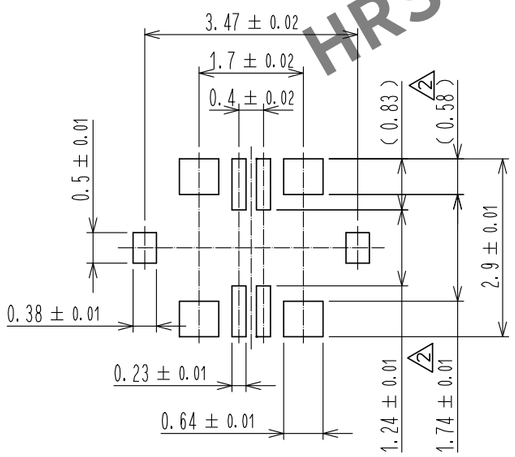
2 1/4

Feb.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.

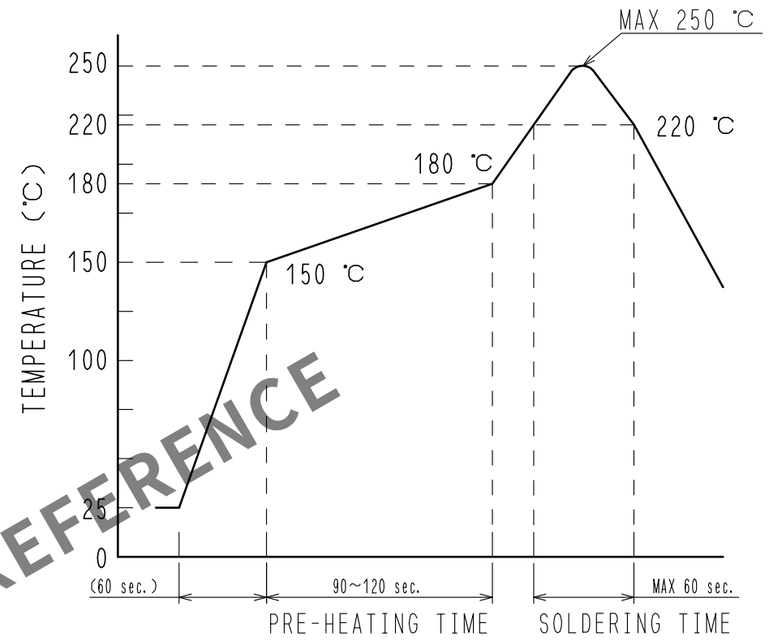
◈Recommended PCB layout



◈Recommended metal mask dimensions
Metal mask thickness : 100μm



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. 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.

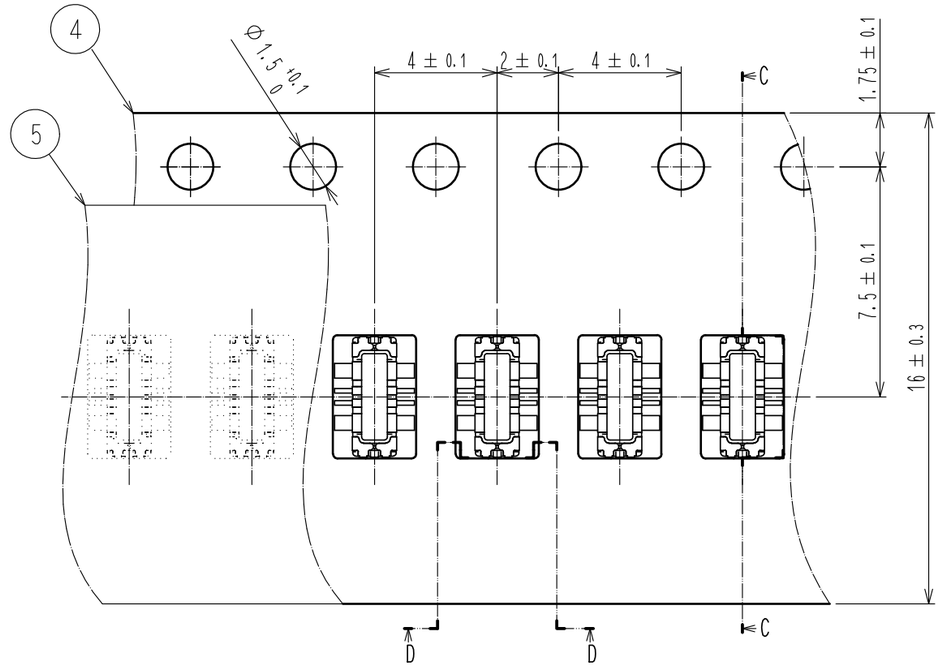
5. Please contact us in case you will make different settings from our recommendation.

HRS DRAWING FOR REFERENCE

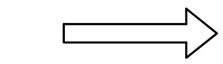
HRS	DRAWING NO.	EDC-358234-53-01
	PART NO.	BM25-4P/2-V(53)
	CODE NO.	CL677-1201-2-53

Feb.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.

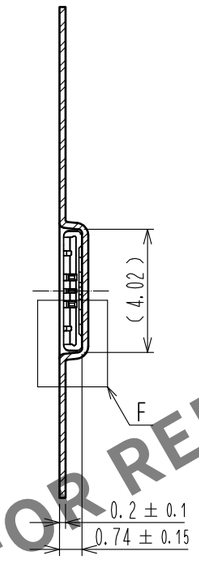
Embossed carrier tape packaging (5:1)



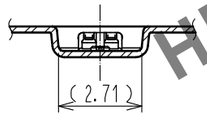
Direction of unreeling



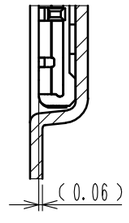
C-C (5:1)



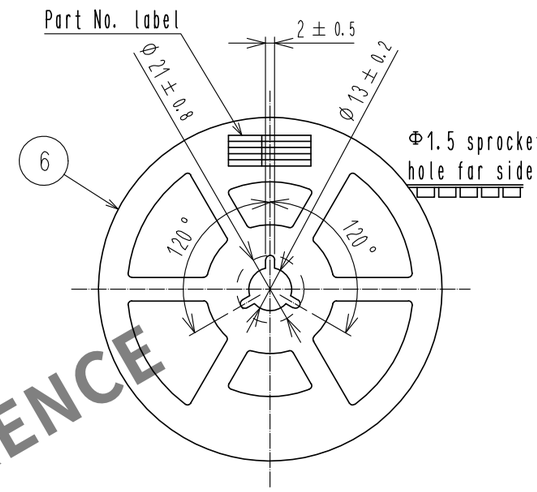
D-D (5:1)

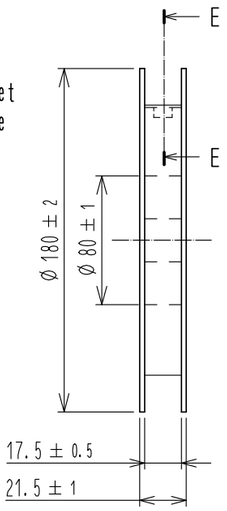


F (10:1)



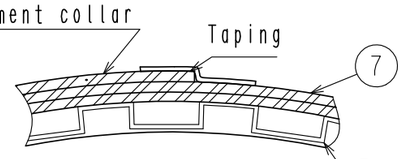
Style and dimension of reel (Free)





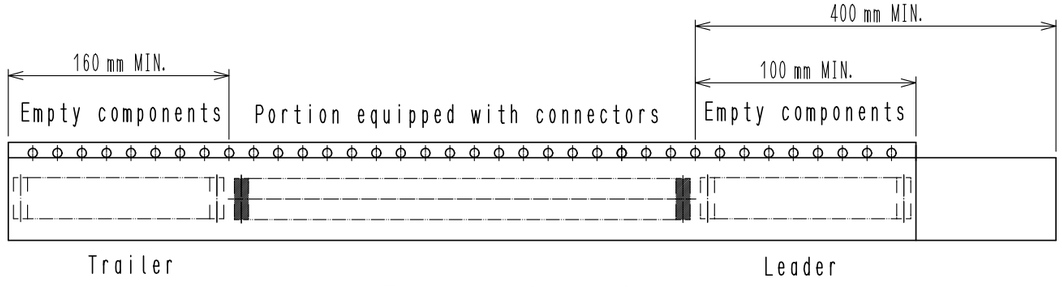
E-E (Free)

9 Reinforcement collar



Detail of part No. label

製造年月日	** ** **	Data of manufactured
製品コード	CL0677-1201-2-53	Code No.
製品名	BM25-4P/2-V(53)	Part No.
数量	1,000	Quantity
納入者	ヒロセ電機(株)	Supplier



8 Taping (Free)

6 . Per reel 1,000 connectors.
7 . The dimensions in parentheses are for reference.
8 . Refer to JIS C 0806 and IEC60286-3 (Packaging of components for automatic handling)
9 . Wrap a reinforcing collar made by polystyrene to the surface of emboss reel at the termination side in order to protect emboss carrier tape, top cover tape.

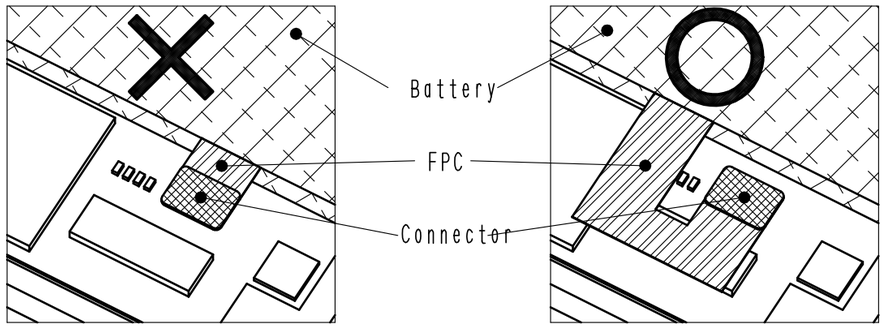
HRS DRAWING FOR REFERENCE

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

Feb.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.

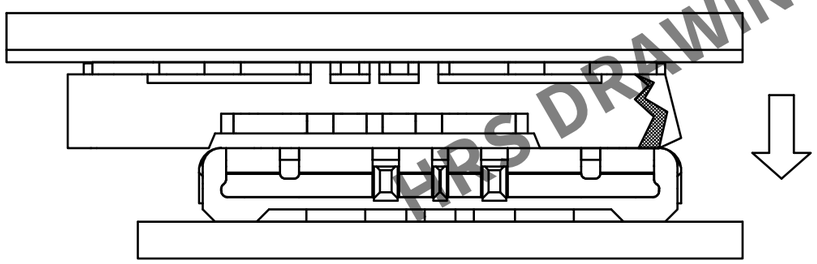
How to draw the FPC △2

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.

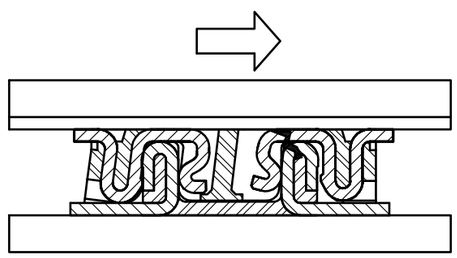


*Possible problems caused by connector mating in incorrect positioning.
Mating the connector in incorrect positioning could lose the function of the connector.

① Insulator could be broken.



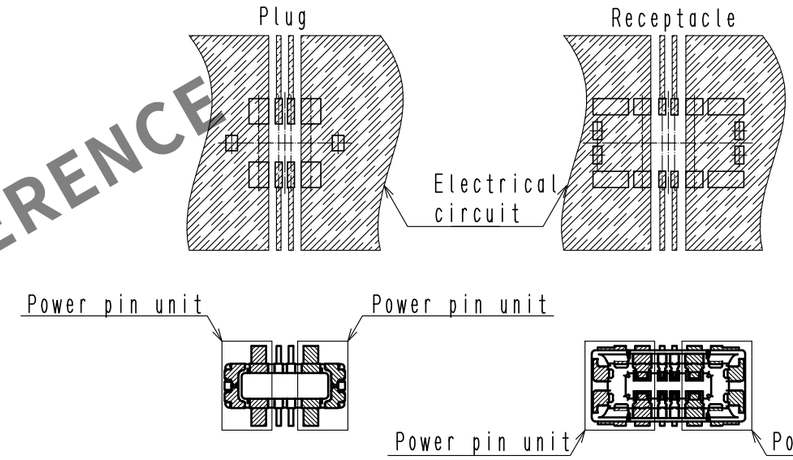
② It could apply excessive mechanical stress to single side of the contact.



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 FOR REFERENCE

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