



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



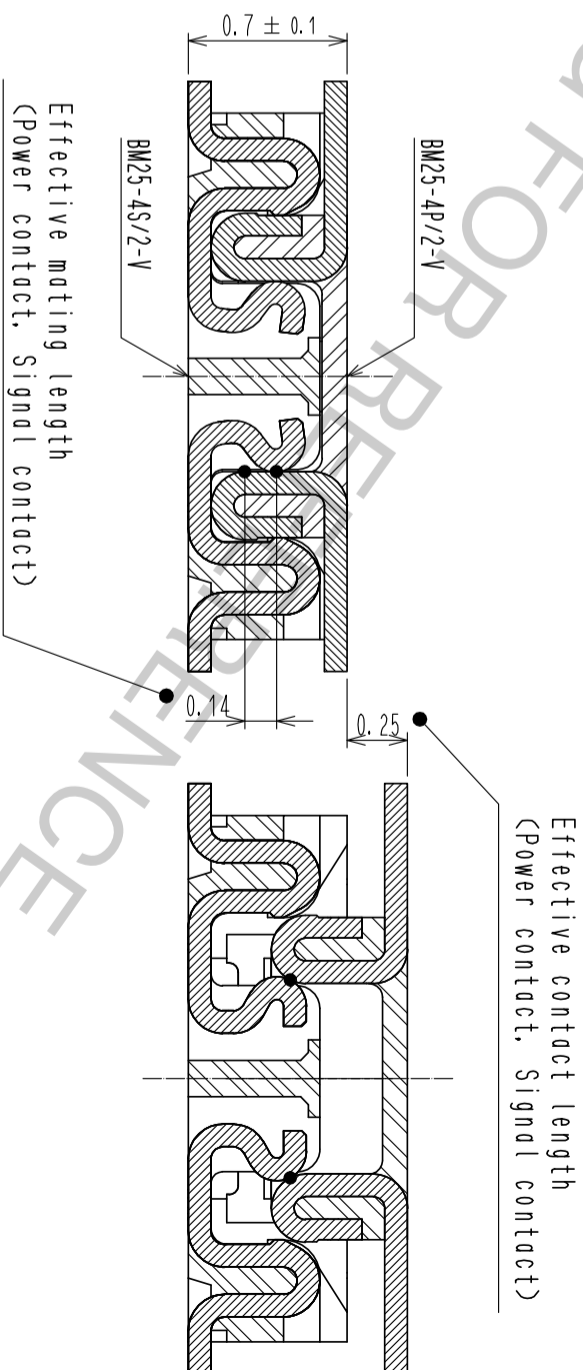
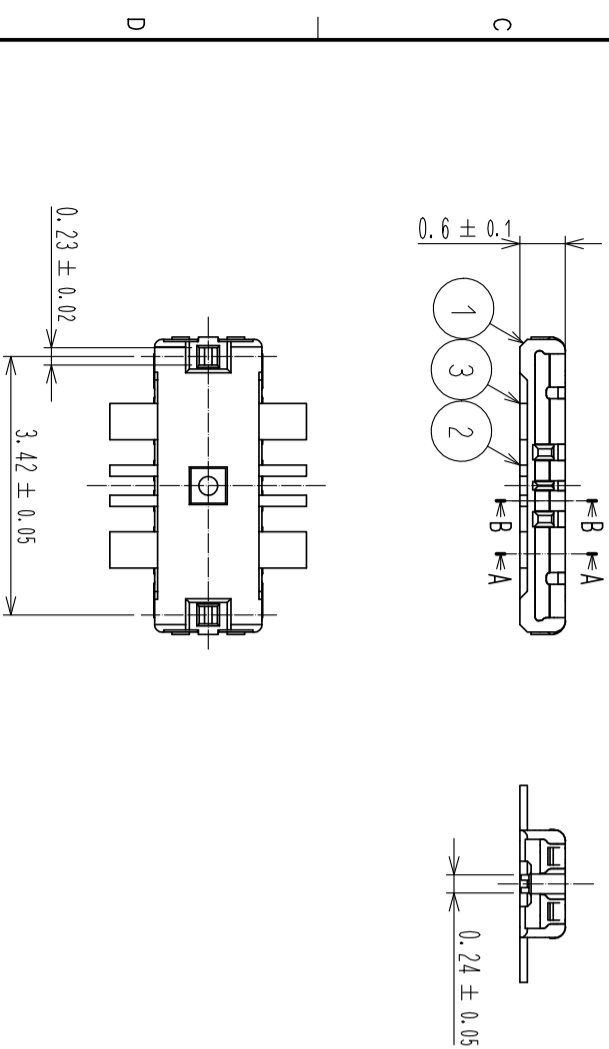
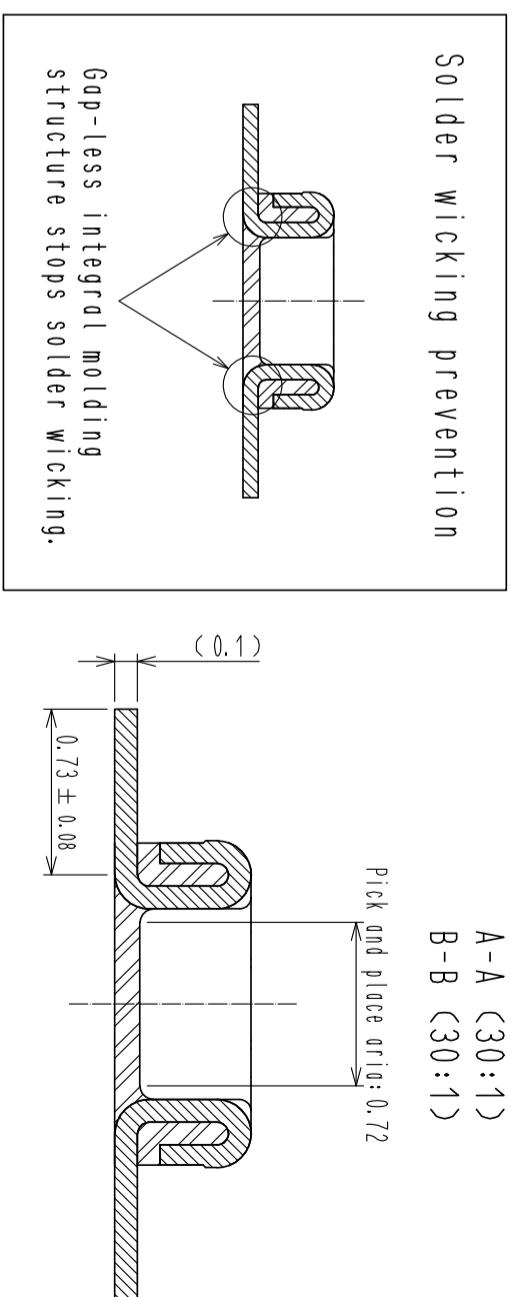
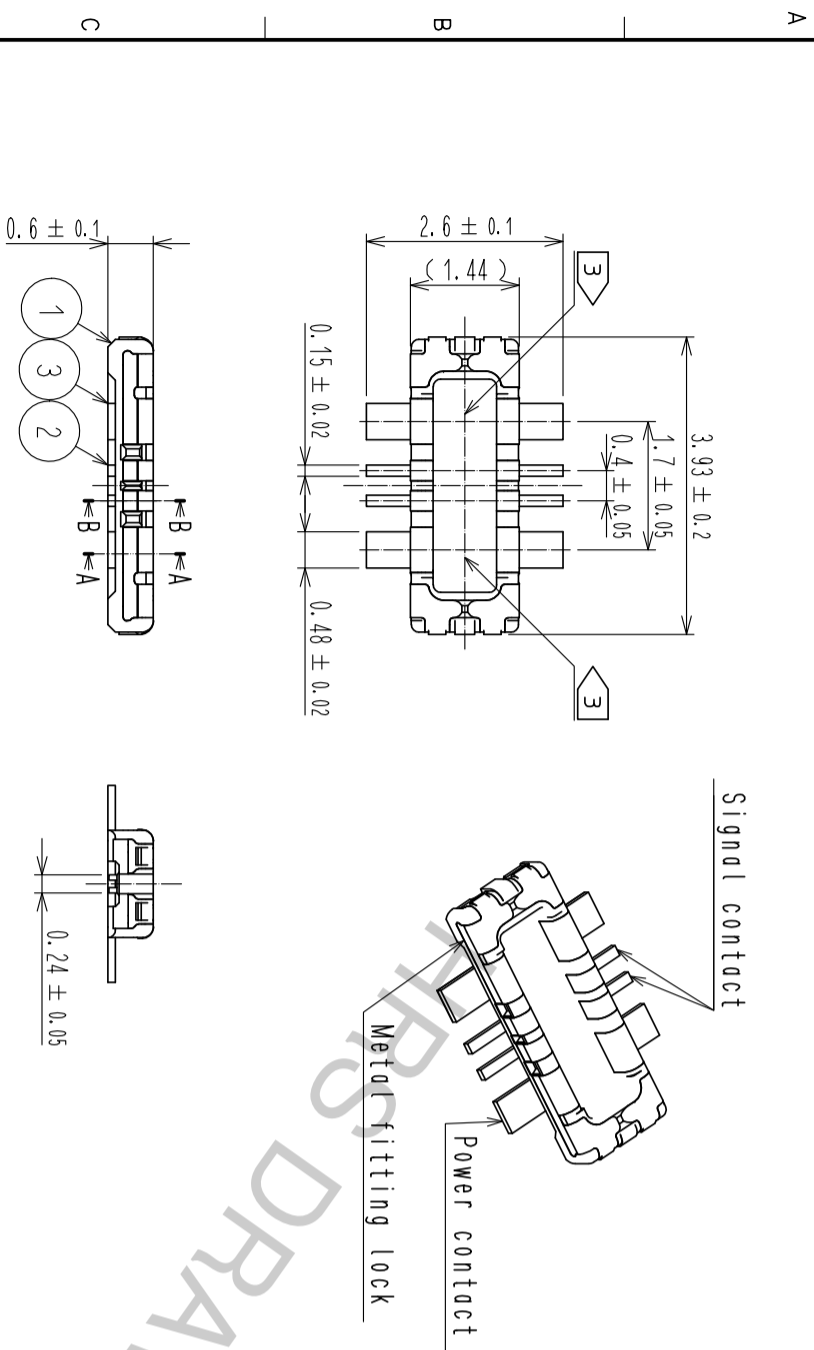
Contact us

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Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China





NOTE 1. All lead co-planarity shall be 0.08mm MAX.

2. Contact plating specifications





Contact area : Gold 0.05 μ m MIN

SMT lead : Gold 0.05 μ m MIN

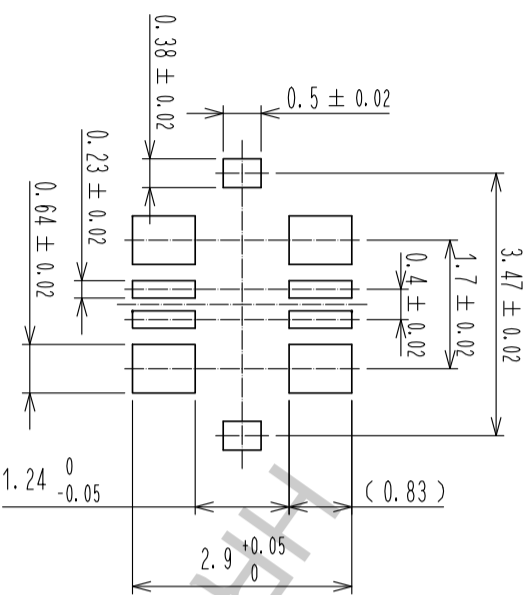
Under plating : Nickel 1 μ m MIN

(Surface Sealing)

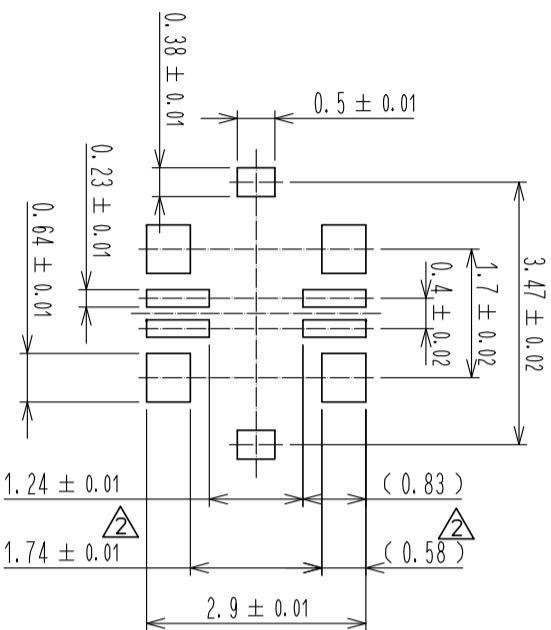
3. HRS mark and CAV No. are indicated in approx. position shown.

| | | | | | | |
|---------------------------|---|---|--------------------------|------------|-----------------------------|----------|
| 3 | COPPER ALLOY |  | 7 | PS | CLEAR, REINFORCEMENT COLLAR | |
| 2 | COPPER ALLOY |  | 6 | PS | BLACK, PLASTIC REEL | |
| 1 | LCP | UL94 V-0, BLACK | 5 | POLYESTER | CLEAR, COVER TAPE | |
| NO. | MATERIAL | FINISH , REMARKS | NO. | MATERIAL | FINISH , REMARKS | |
| UNITS | SCALE | COUNT | DESCRIPTION OF REVISIONS | DESIGNED | CHECKED | DATE |
| mm |  10 : 1 |  3 | DIS-H-00001203 | TR. YUNOKI | TS. MIYAZAKI | 15.12.22 |
| APPROVED : MO. ISHIDA | | | DRAWING NO. | | | |
| CHECKED : YH. MICHIDA | | | PART NO. | | | |
| DESIGNED : TR. YUNOKI | | | CODE NO. | | | |
| DRAWN : KR. AJITO | | | CL677-1201-2-53 | | | |
| HIROSE ELECTRIC CO., LTD. | | | EDC-358234-53-01 | | | |
| | | | BM25-4P/2-V(53) | | | |

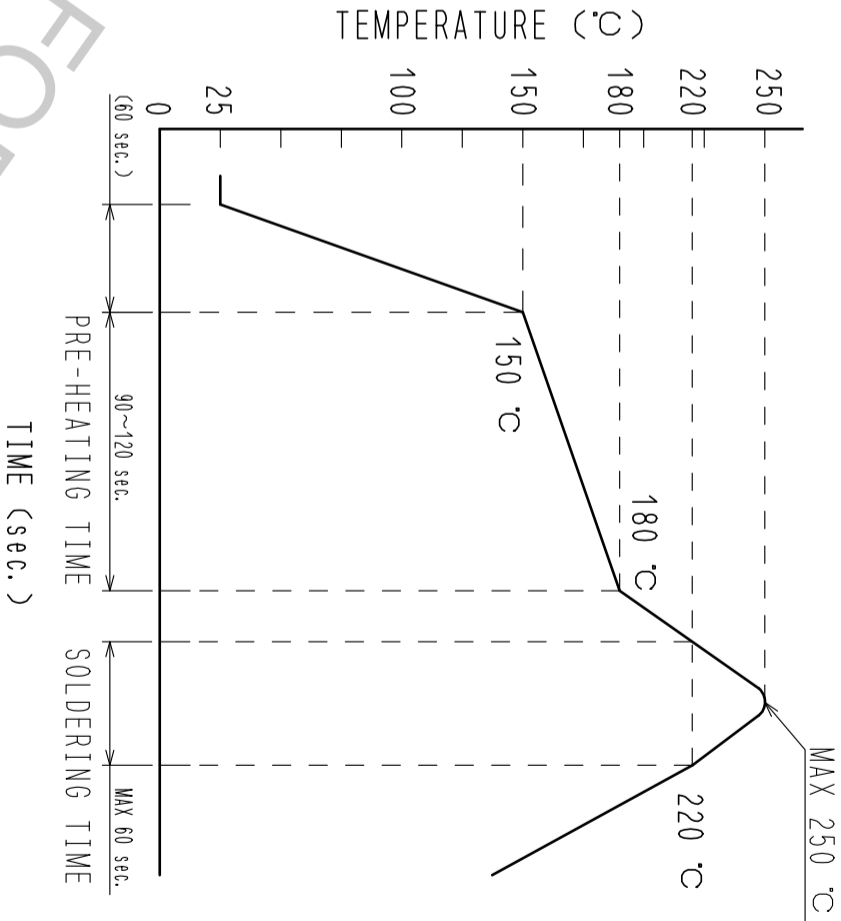
◆ Recommended PCB layout



◆ Recommended metal mask dimensions
Metal mask thickness : 100 μm



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



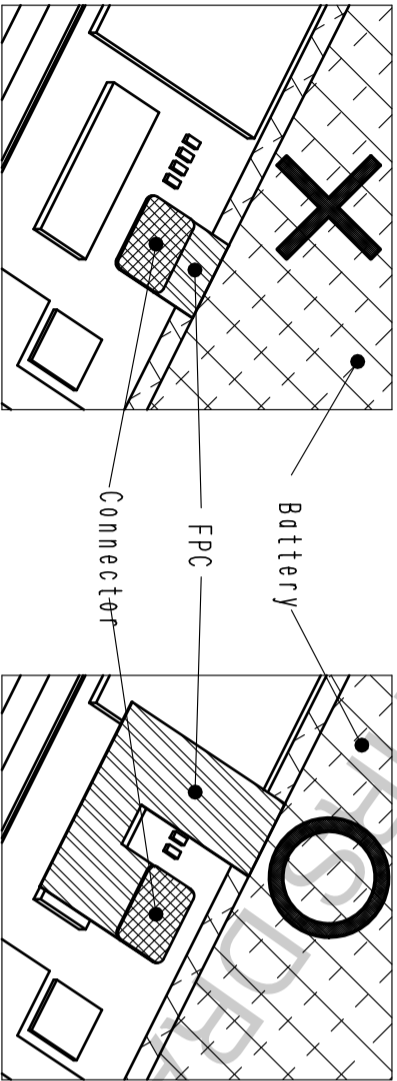
Reflow method:IR reflow
Number of reflow cycles:2 cycles MAX.
1)Reflow time
Duration above 220°C, 60 sec MAX.
(Peak temperature:250°C MAX)
2)Pre-heat time
Pre-heat temperature(MIN):150°C
Pre-heat temperature(MAX):180°C
Pre-heat time:90~120 sec.

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.

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

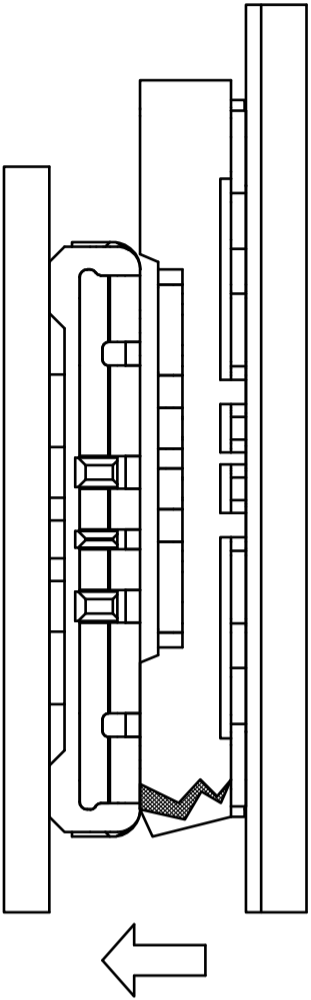
How to draw the FPC

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.

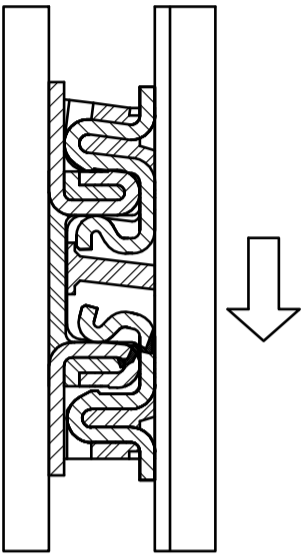


*Possible problems caused by connector mating in incorrect positioning.
Mating the connector in incorrect positioning could lose the function of the connector.

① Insulator could be broken.



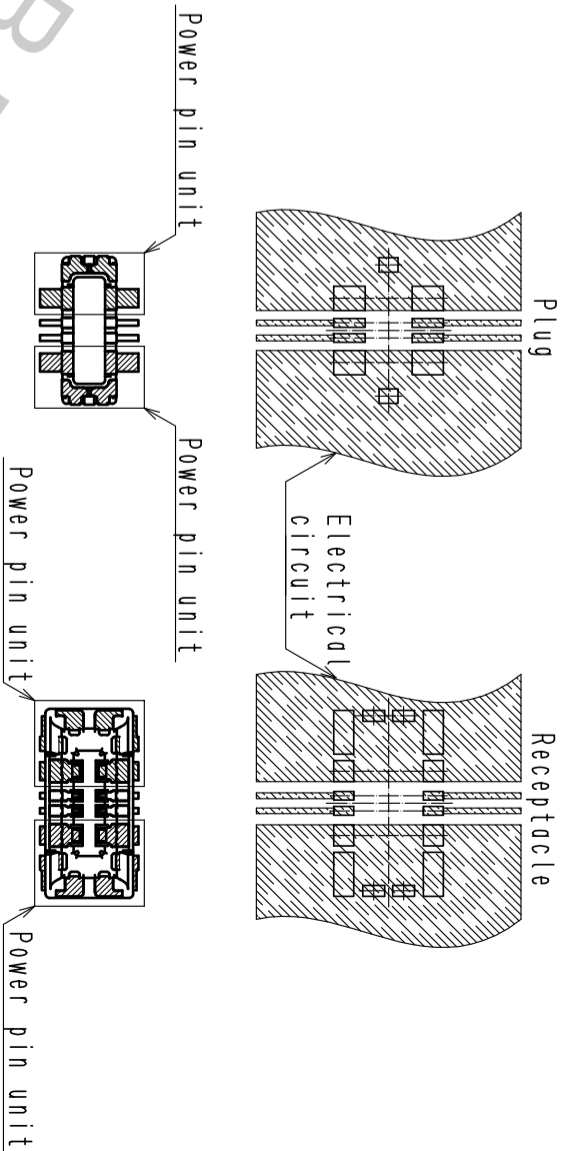
② It could apply excessive mechanical stress to single side of the contact.



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



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