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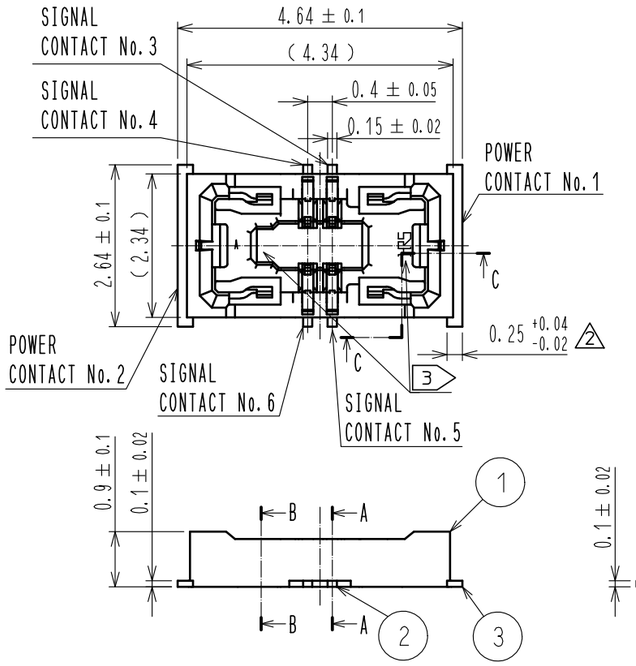
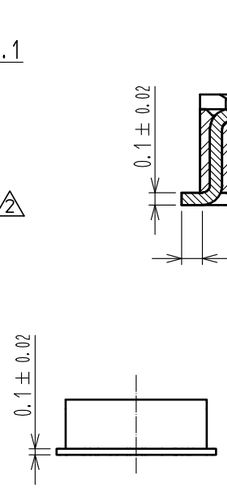
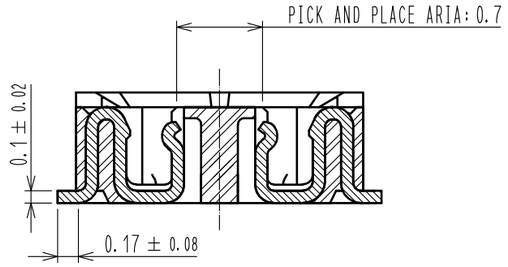
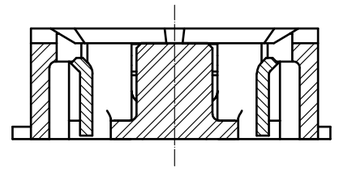


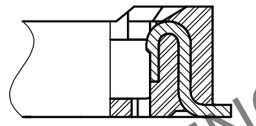

A-A(20:1)



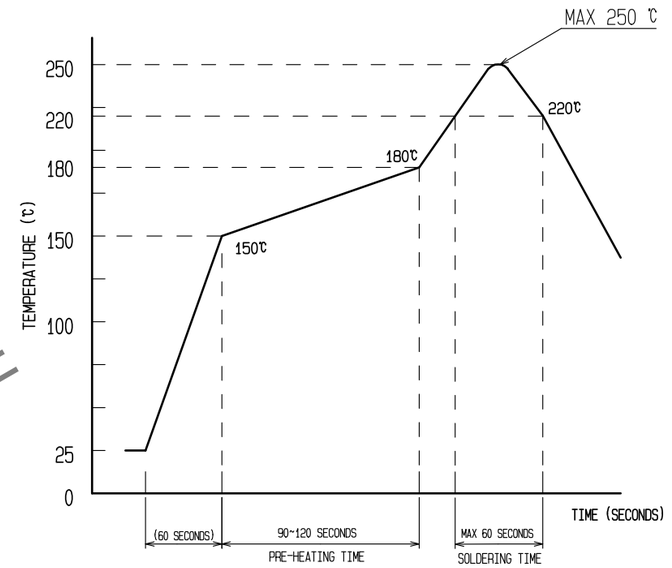

B-B(20:1)



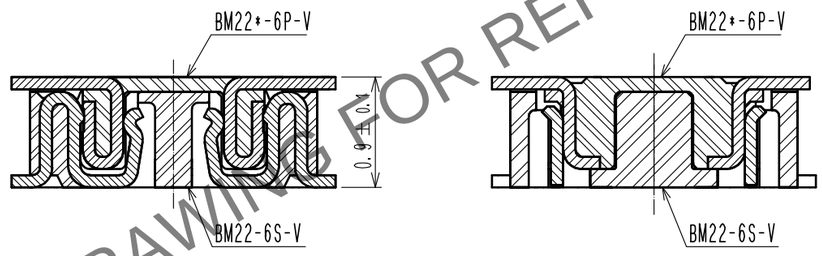
C-C(20:1)

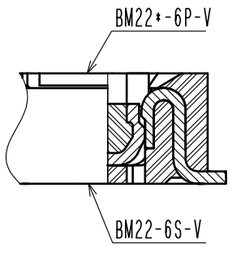


5 RECOMMENDED REFLOW TEMPERATURE PROFILE USING LEAD-FREE SOLDER PASTE.




ENGAGEMENT FIGURE (20:1)



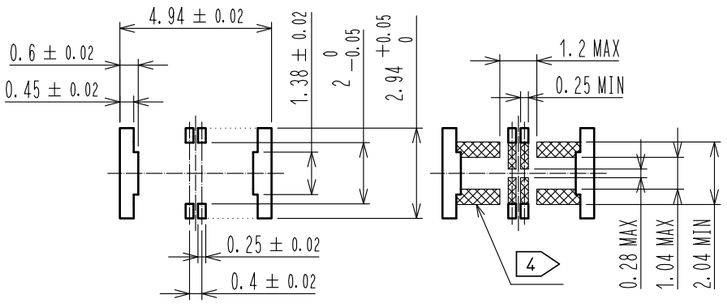




NOTE 1 . ALL LEAD CO-PLANARITY SHALL BE 0.08mm MAX
2 CONTACT PLATING SPECIFICATIONS
CONTACT AREA : GOLD 0.05μm MIN
SMT LEAD : GOLD 0.01μm MIN
UNDER PLATING : NICKEL 1μm MIN
( SURFACE : SEALING )
3 HRS MARK AND CAV No. ARE INDICATED IN APPROX POSITION SHOWN.
4 PROHIBITED AREA OF PATTERN WIRING AND SOLDER.
(FOR EACH AREA. THE WIRING THAT TOUCHES ON THE SOLDER CAN BE ATTACHED.
THEN COVERD WITH A FILM TO KEEP SOLDER OUT.)

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.

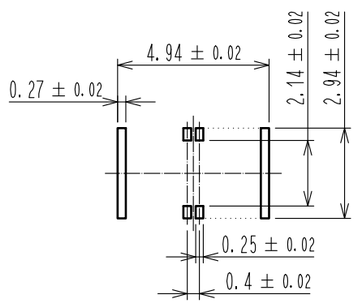
5 THIS TEMPERATURE PROFILE IS PER THE CONDITIONS SHOWN ABOVE. ADDISIONAL FACTORS. SUCH AS SOLDER PASTE TYPE, PCB SIZE AND OTHER MOUNTED COMPONENTS COULD AFFECT THE PROFILE, THEREFORE, A THOROUGH EVALUATION OF MOUNTING COONDITION IS REQUIRED PRIOR TO PRODUCTION. TEPERATURE IS MEASURED AT CONTACT LEAD.

◆RECOMMENDED PCB LAYOUT(5:1)




◆RECOMMENDED METAL MASK DIMENSIONS(5:1)

METAL MASK THICKNESS : 100μm




| NO. | MATERIAL | FINISH , REMARKS | NO. | MATERIAL | FINISH , REMARKS |
|---|---|---|---|---|---|
| 4 | PS | CLEAR (EMBOSSED CARRIER TAPE) | | | |
| 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) |

| UNITS | SCALE | | COUNT | DESCRIPTION OF REVISIONS | DESIGNED | CHECKED | DATE |
|---|---|---|---|---|---|---|---|
| mm | 10 : 1 | 2 | 1 | DIS-H-00001004 | NY. YAMASHIRO | TS. MIYAZAKI | 15.10.17 |

HIROSE ELECTRIC CO., LTD.

| | | | |
|---|---|---|---|
| APPROVED | MO. ISHIDA | 14.10.10 | DRAWING NO. EDC-345876-53-04 |
| CHECKED | TS. MIYAZAKI | 14.10.10 | PART NO. BM22-6S-V(53) |
| DESIGNED | NY. YAMASHIRO | 14.10.10 | CODE NO. CL677-1004-1-53 |
| DRAWN | KR. AJITO | 14.10.10 | 2 1/3 |

HRS DRAWING FOR REFERENCE

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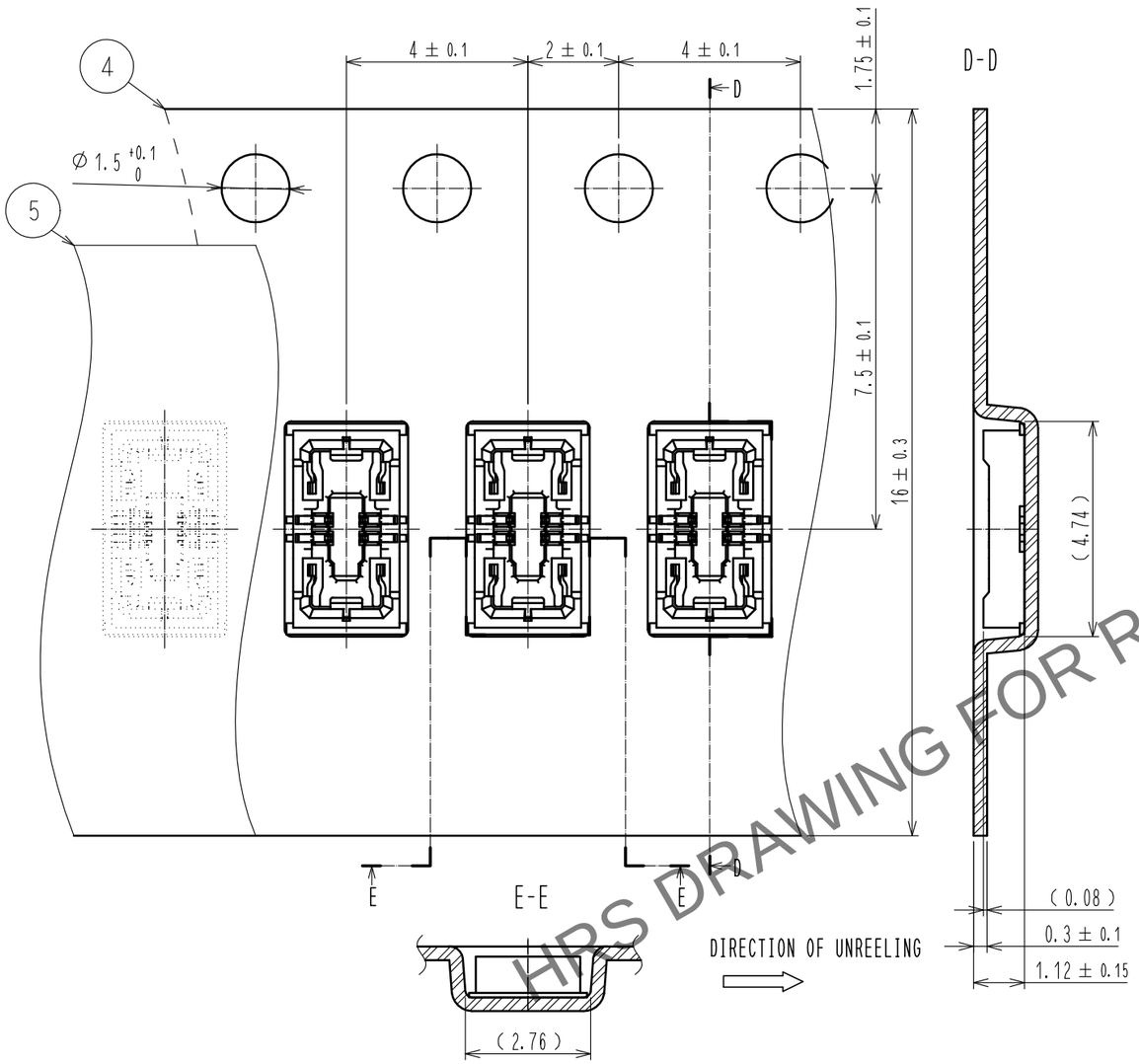
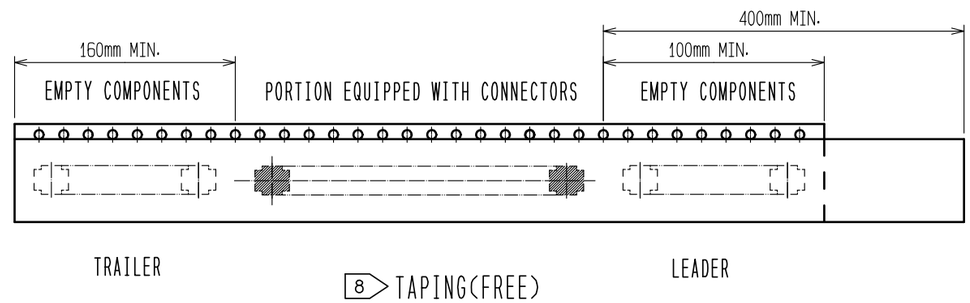
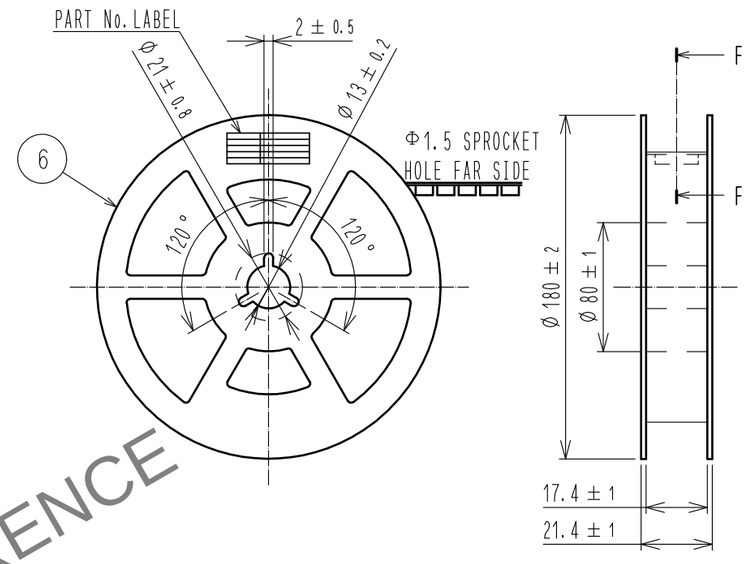
## EMBOSSED CARRIER TAPE PACKAGING (FREE)



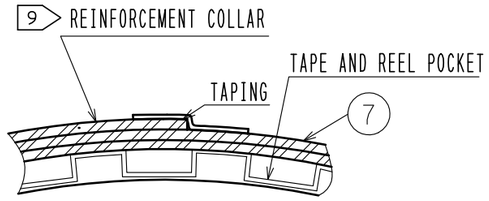




8 TAPING(FREE)

## STYLE AND DIMENTION OF REEL (FREE)




F-F ( FREE )




DETAIL OF PART No. LABEL

| | | |
|---|---|---|
| 製造年月日 | ** ** ** | DATE OF MANUFACTURED |
| 製品コード | CL0677-1004-1-53 | CODE No. |
| 製品名 | BM22-6S-V(53) | PART No. |
| 数量 | 1,000 | QUANTITY |
| 納入者 | ヒロセ電機(株) | SUPPLIER |

6. PER REEL 1,000 CONNECTORS.
7. THE DIMENTIONS IN PARENTHESES ARE FOR REFFERENCE.
8. REFER TO JIS C 0806-3(IEC 60286-3)(PACKAGING OF COMPONENTS FOR AUTOMATIC HANDLIMG)
9. AFTER PACKAGING, ROLL 2 METERS OF THE REINFORCEMENT COLLAR TO OUTER CIRCUMFERENCE OF TAPE AND REEL POCKET. AND TAPE DOWN AT THE END THE COLLAR.

HRS DRAWING FOR REFERENCE

| | | |
|---|---|---|
| HRS | DRAWING NO. | EDC-345876-53-04 |
| | PART NO. | BM22-6S-V(53) |
| | CODE NO. | CL677-1004-1-53 |

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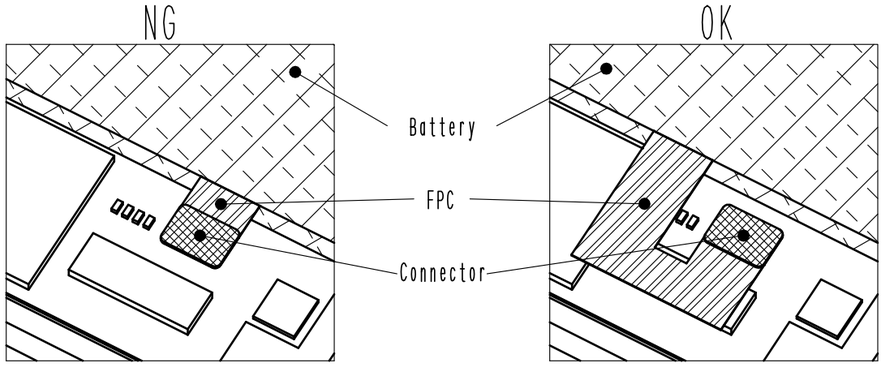
## How to draw the FPC

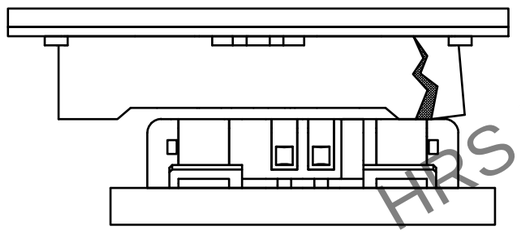
BM22 series connector is intended to carry 3A to 4A electrical current for battery application. FPC may have less flexibility than usual, since the copper foil becomes wider and thicker to carry current of 3A.

Please design the FPC to have a flexibility to absorb the displacement* of the connector casede by fixing PCB and battery.

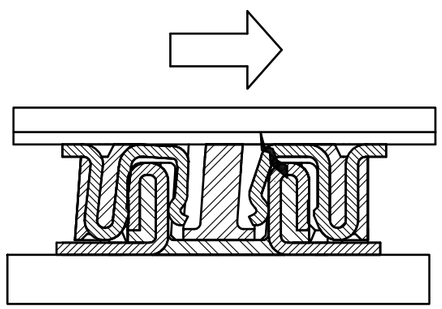



*Possible problems caused by connector mating in incorrect positioning.
Mating the connector in incorrect positioning could lose the function of the connector.

① Insulator could be broken.

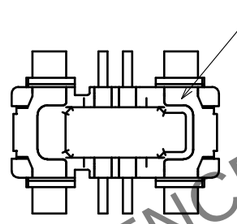


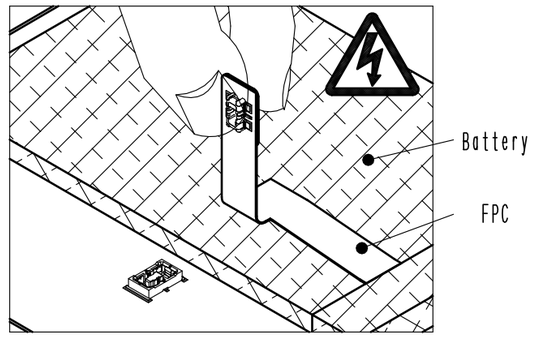
② It could apply excessive mechanical stress to single side of the contact.



## Electric shock hazard

Since power contact of header side is exposed, the battery may short out if you touch the contact with finger during mating operation. To avoid this accident, mounting a header on main PWB and mounting a receptacle on battery side is recommended.




HRS DRAWING FOR REFERENCE

| | | |
|---|---|---|
| HRS | DRAWING NO. | EDC-345876-53-04 |
| | PART NO. | BM22-6S-V(53) |
| | CODE NO. | CL677-1004-1-53 |

△2 3/3