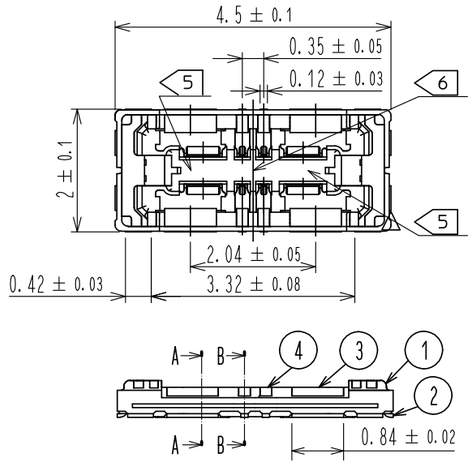
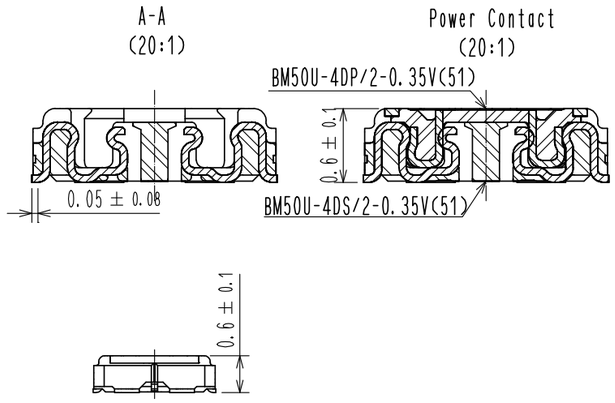
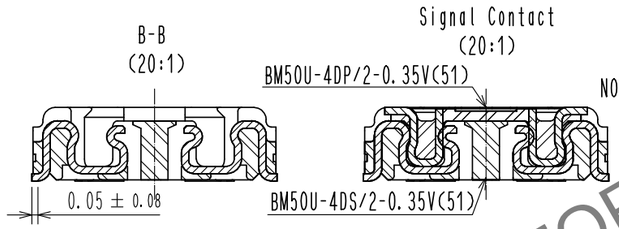
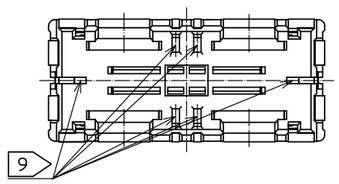
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2021/12/13 19:08:10 TY. MORISHITA
BM50U-4DS(51)-0.35V(53)

Design modified

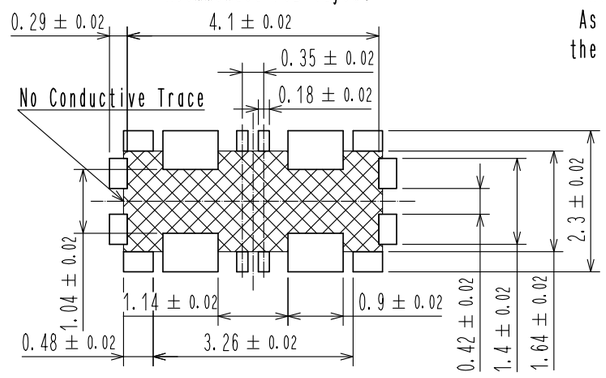




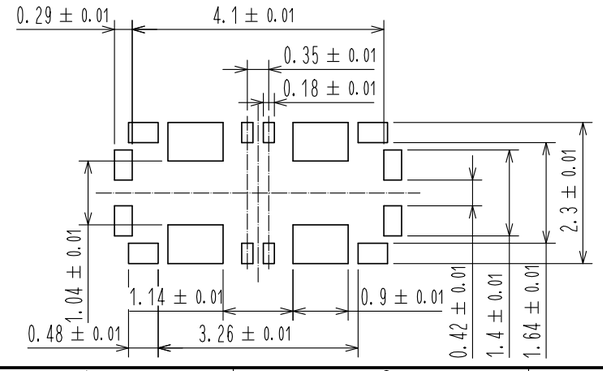




◆Rcommended PCB layout

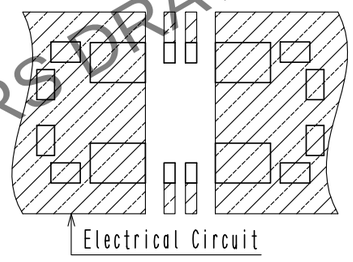


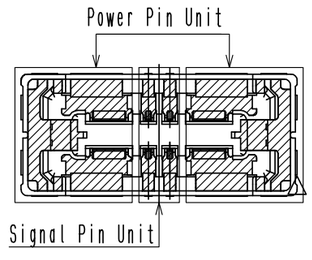
◆Rcommended metal mask dimensions. Metal mask thickness:80μm



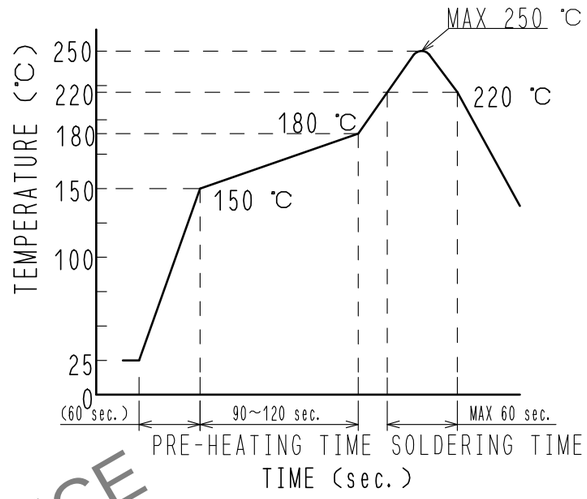
◆How to draw the electrical circuit

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





7 ◆Recommended reflow temperature profile using lead-free solder paste.



NOTE
1. All lead co-planarity shall be 0.08mm MAX.
2. Plating specifications
   Contact area : Gold 0.1μm MIN
   SMT lead : Gold 0.076μm MIN
   Under plating : Nickel 2μm MIN
   (Surface : Sealing)
3. Product color : Black
4. Manufacturing process : Insertion molding.
5. HRS mark and cavity No. are indicated.
6. Lot No. are indicated.
7. 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.
8. Please contact us in case you will make different settings from our recommendation.
   For the routing on the indicated PCB surface, apply solder resist in order for the insulation treatment.
9. No gold plating is acceptable for this area.

HRS DRAWING FOR REFERENCE

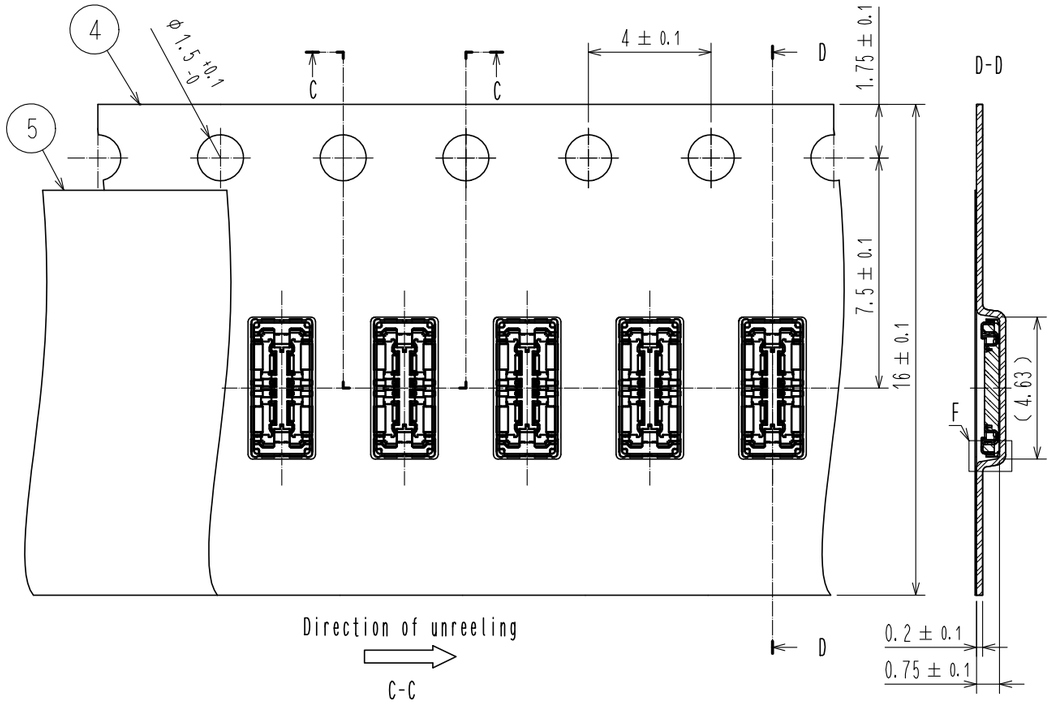
NO.	MATERIAL	FINISH , REMARKS	NO.	MATERIAL	FINISH , REMARKS
4	COPPER ALLOY	2	8	PS	CLEAR, REINFORCEMENT COLLAR
3	COPPER ALLOY	2	7	PS	BLACK, PLASTIC REEL
2	COPPER ALLOY	2	6	Polyester	CLEAR, COVER TAPE
1	LCP	UL94 V-0, Black	5	PS	CLEAR, EMBOSSED CARRIER TAPE

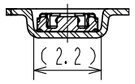
UNITS	SCALE	COUNT	DESCRIPTION OF REVISIONS	DESIGNED	CHECKED	DATE
mm	10 : 1	0				

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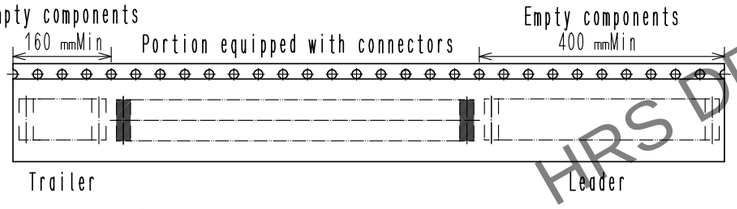
APPROVED	WR. FUKUCHI	20211213	DRAWING NO.	EDC-386795-53-00
CHECKED	RT. SHIMIZU	20211213	PART NO.	BM50U-4DS/2-0.35V(53)
DESIGNED	TY. MORISHITA	20211213	CODE NO.	CL0677-0196-0-53
DRAWN	TY. MORISHITA	20211213		0 1/2

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2021/12/15 19:08:10 TY. MORISHITA



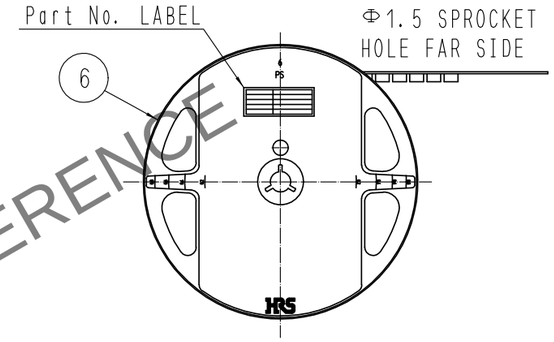


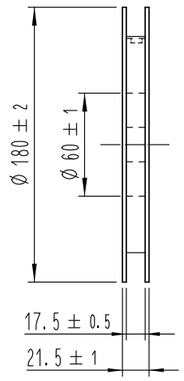
12 ◆Tapin(free)



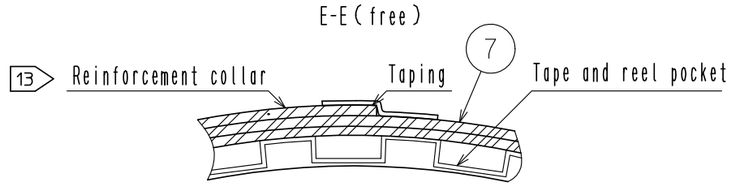
10 . Per reel 1,000 connectors.
11 . The dimensions in parentheses are for reference.
12 . Refer to JIS C 0806 and IEC60286-3 (Packaging of components for automatic handling)
13 . Wrap a reinforcing collar made by polystyrene to the surface of emboss reel at the termination sidein order to protect emboss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

◆Style and dimension of reel (free)



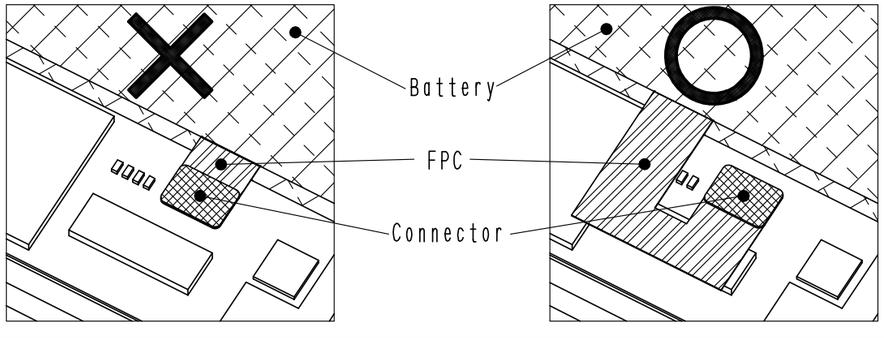


E-E (free)



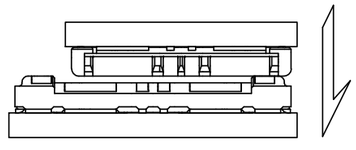
◆How to draw the FPC

BM50 series connector is intended to carry 15A electrical current for battery application. FPC may have less flexibility than usual, since the copper foil becomes wider and thicker to carry current of 15A.
Please design the FPC to have a flexibility to absorb the displacement* of the connector cased by fixing PCB and battery.

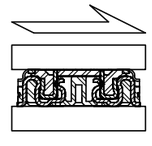


*Possible problems caused by connector mating in incorrect positioning. Mating the connector in incorrect positioning could lose the function of the connector.

① Insulator could be broken.



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



HRS DRAWING FOR REFERENCE

DRAWING NO.	EDC-386795-53-00
PART NO.	BM50U-4DS/2-0.35V(53)
CODE NO.	CL0677-0196-0-53

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