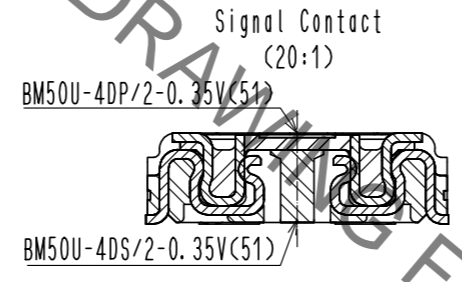
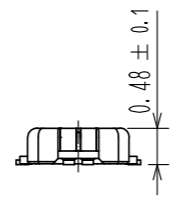
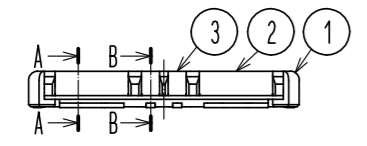
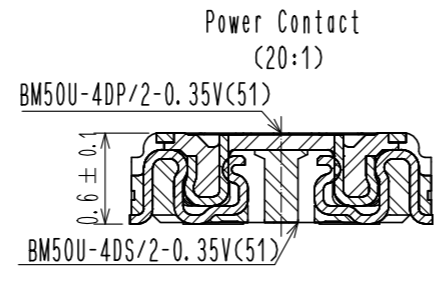
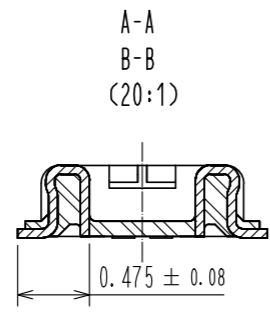
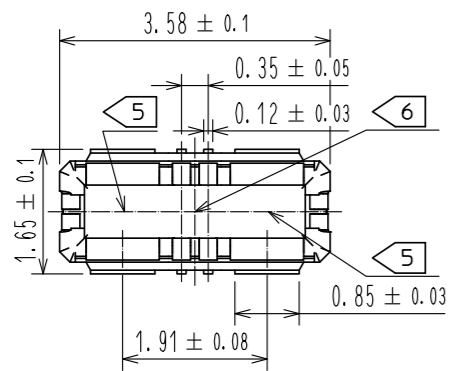
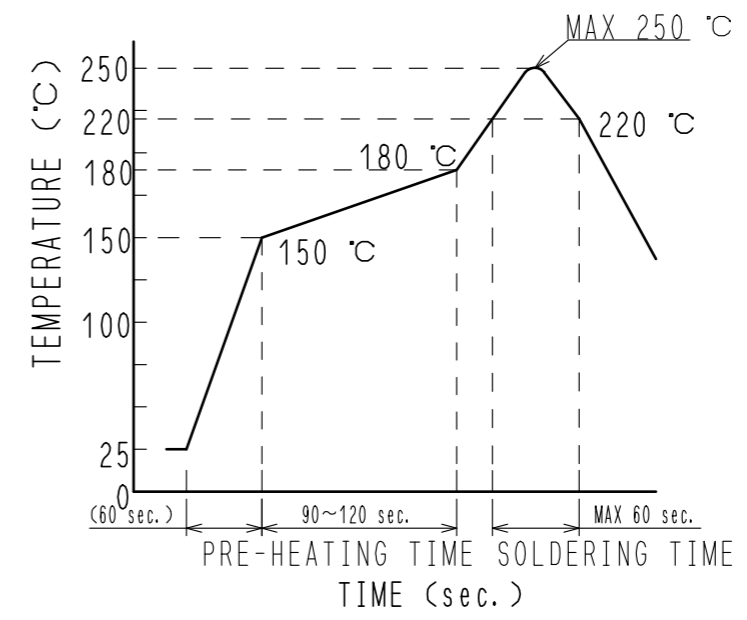


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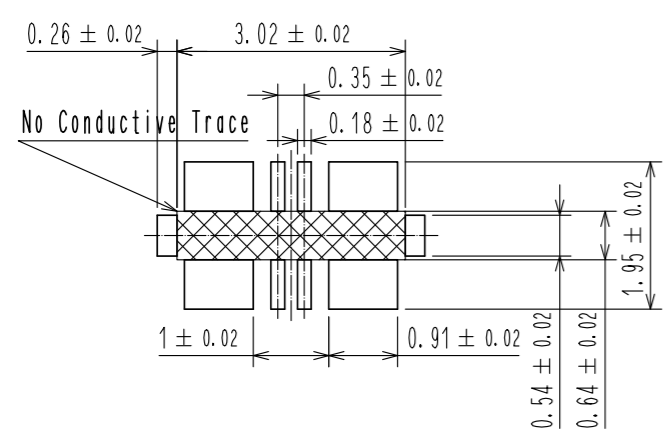


7. Recommended reflow temperature profile using lead-free solder paste.



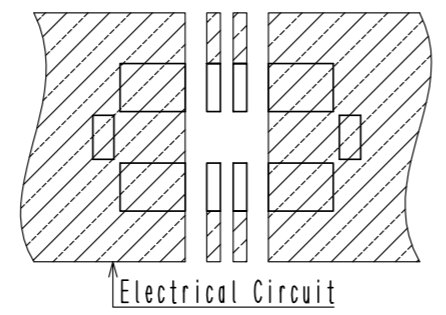
- NOTE
- All lead co-planarity shall be 0.08mm MAX.
 - Plating specifications
 - Contact area : Gold 0.1μm MIN
 - SMT lead : Gold 0.076μm MIN
 - Under plating : Nickel 2μm MIN (Surface : Sealing)
 - Product color : Black
 - Manufacturing process : Insertion molding.
 - HRS mark and cavity No. are indicated.
 - Lot No. are indicated.
 - 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.
 - 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.

Recommended PCB layout

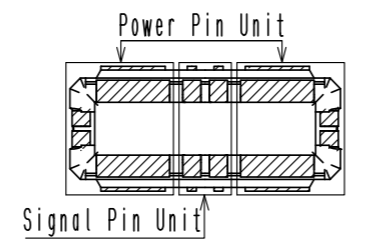
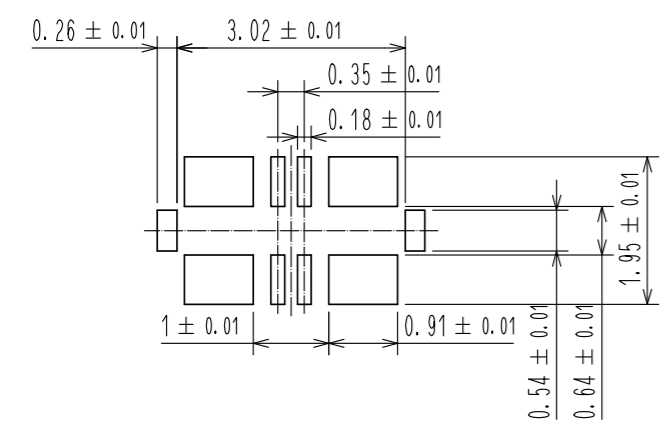


How to draw the electrical circuit

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

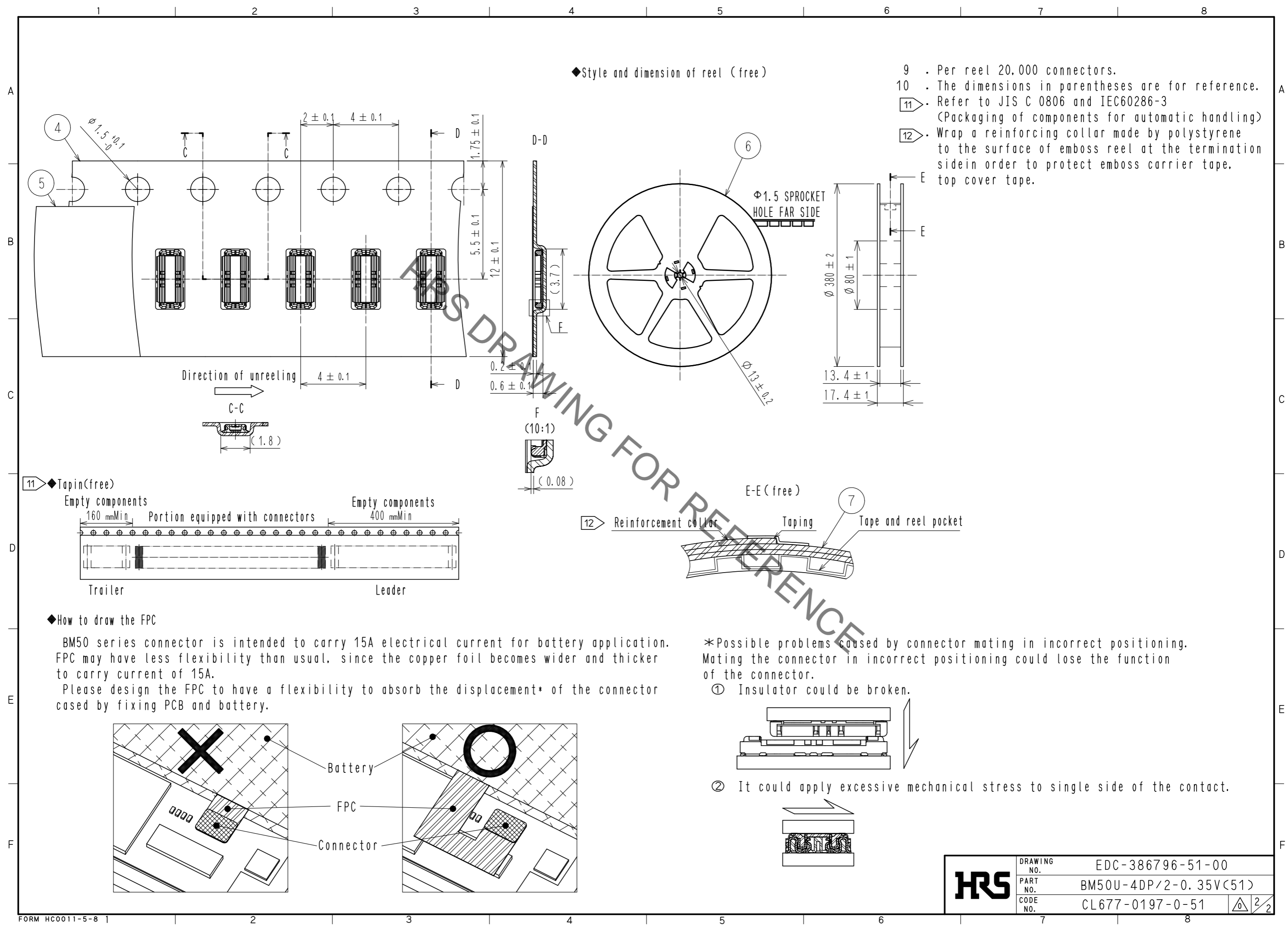


Recommended metal mask dimensions. Metal mask thickness: 80μm



3	COPPER ALLOY	2	7	PS	CLEAR, REINFORCEMENT COLLAR
2	COPPER ALLOY	2	6	PS	CLEAR, COVER TAPE
1	LCP		5	Polyester	BLACK, PLASTIC REEL
			4	PS	CLEAR, EMBOSSED CARRIER TAPE
NO.	MATERIAL	FINISH, REMARKS	NO.	MATERIAL	FINISH, REMARKS
UNITS mm	SCALE 10:1	COUNT	DESCRIPTION OF REVISIONS	DESIGNED	CHECKED
APPROVED : WR. FUKUCHI 20190610			DRAWING NO. EDC-386796-51-00		
CHECKED : TY. OOI 20190610			PART NO. BM50U-4DP/2-0.35V(51)		
DESIGNED : ST. HIRONAKA 20190607			CODE NO. CL677-0197-0-51		
DRAWN : ST. HIRONAKA 20190607					

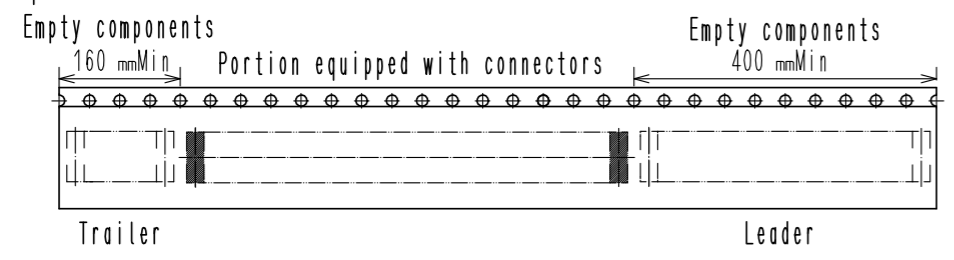
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◆Style and dimension of reel (free)

- 9 . Per reel 20,000 connectors.
- 10 . The dimensions in parentheses are for reference.
- 11 . Refer to JIS C 0806 and IEC60286-3
(Packaging of components for automatic handling)
- 12 . Wrap a reinforcing collar made by polystyrene to the surface of emboss reel at the termination side in order to protect emboss carrier tape.

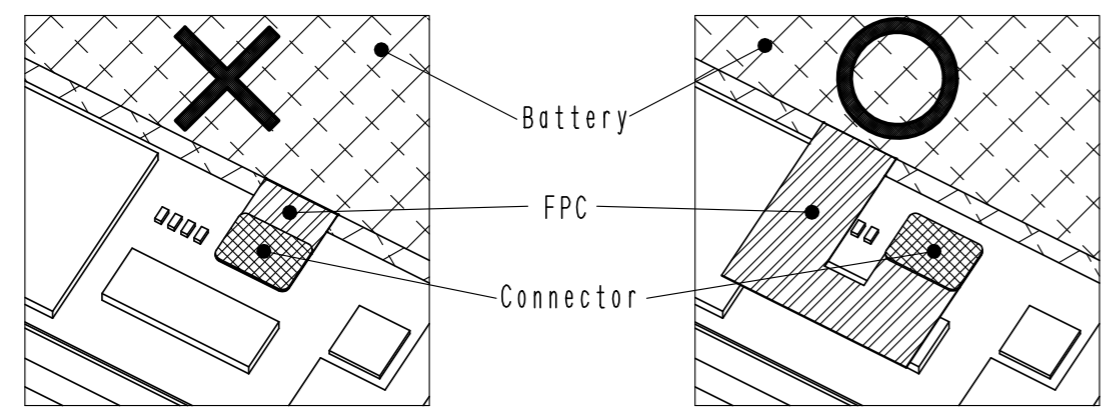
11 ◆Tapin (free)



◆How to draw the FPC

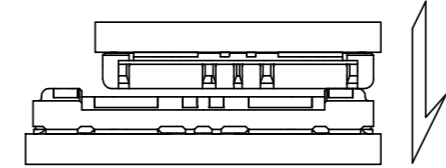
BM50 series connector is intended to carry 15A electrical current for battery application. FPC may have less flexibility than usual, since the copper foil becomes wider and thicker to carry current of 15A.

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

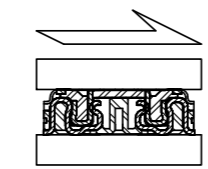


*Possible problems caused by connector mating in incorrect positioning. Mating the connector in incorrect positioning could lose the function of the connector.

① Insulator could be broken.



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



HRS	DRAWING NO.	EDC-386796-51-00	2/2
	PART NO.	BM50U-4DP/2-0.35V(51)	
	CODE NO.	CL677-0197-0-51	