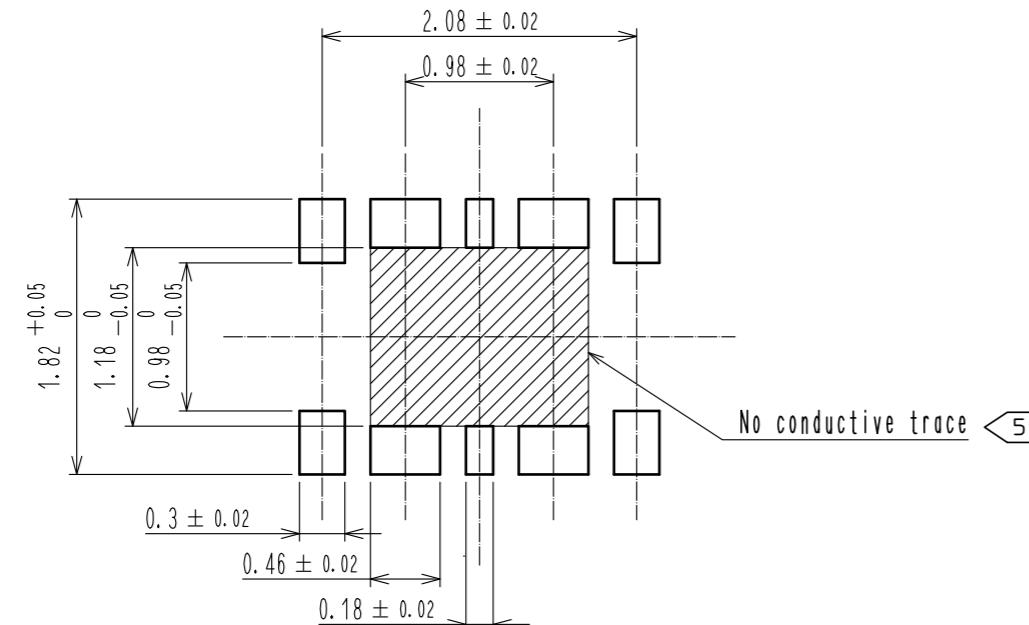
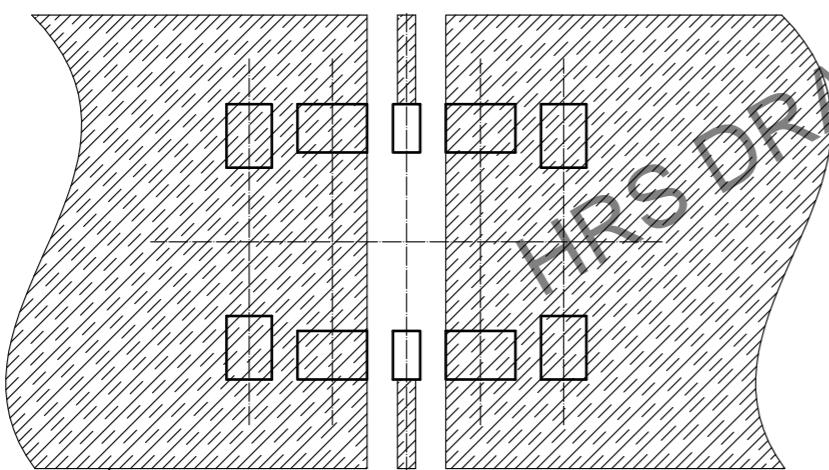


◆ Recommended PCB layout

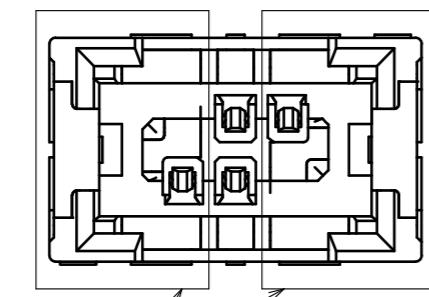


◆ Recommended metal mask dimensions
Metal mask thickness : $80 \mu\text{m}$
(Open ratio : 100% for PCB layout)

◆ Recommended electrical circuit layout

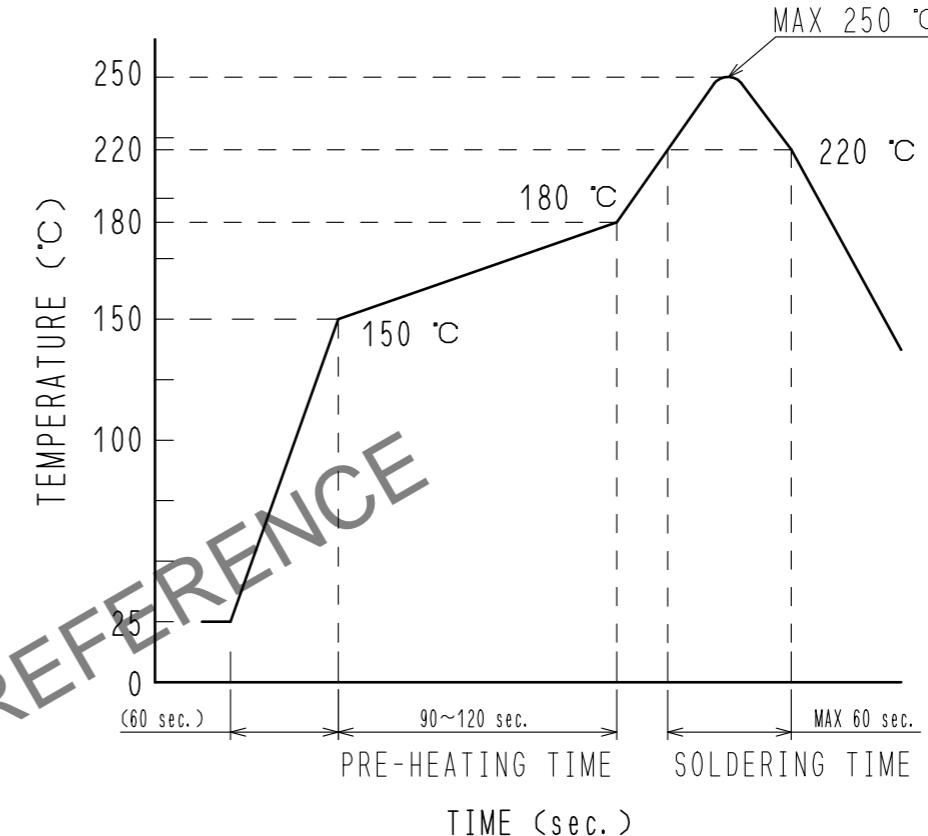


Electrical circuit



Power pin unit

◆ 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) This temperature profile is based on the suggested metal mask and footprint. Please contact us if using different settings from our recommendation.

◆ 5) For the routing on the indicated PCB surface, apply solder resist in order for the insulation treatment.



DRAWING NO. EDC-362699-53-01
PART NO. BM29B0.6-2DS/2-0.35V(53)
CODE NO. CL0673-7001-0-53

2 2 4

Technical drawing showing a component assembly. The drawing includes the following dimensions:

- Vertical distance from the bottom reference line to the top of the left part: 5.5 ± 0.1
- Vertical distance from the bottom reference line to the top of the right part: 12 ± 0.3
- Horizontal distance from the left edge of the left part to the vertical line: 0.2 ± 0.1
- Horizontal distance from the left edge of the left part to the right edge of the right part: 0.74 ± 0.15
- Horizontal distance from the right edge of the right part to the right edge of the assembly: (2.58)

A horizontal line labeled 'C' is located at the bottom left. A vertical dashed line labeled 'D' is located on the right side of the right part. A reference line extends from the left edge of the left part to the right edge of the right part.

The diagram illustrates a component assembly. At the top, a cross-sectional view shows a central rectangular area with a height of (1.61) mm. Below this, a horizontal line indicates a total width of 400 mm MIN. The assembly is divided into three main sections: 'Empty components' on the left and right, and a 'Portion equipped with connectors' in the center. The 'Empty components' sections have a minimum width of 160 mm MIN. The 'Portion equipped with connectors' section is positioned in the center, with a dashed line below it indicating a height of 100 mm MIN. The entire assembly is shown in perspective at the bottom, featuring a series of circular holes and vertical supports.

8 Taping (Free)

Style and dimension of reel (Free)

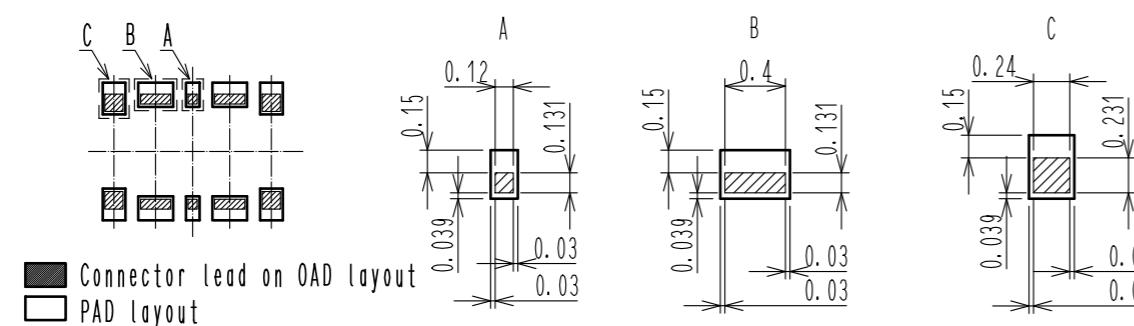
Technical drawing of a sprocket assembly. The main drawing shows a circular sprocket with a central hub and four lobes. The outer diameter is $\Phi 112 \pm 0.8$. The hub height is 2 ± 0.5 . The distance from the hub center to the center of the $\Phi 13 \pm 0.2$ hole is $\Phi 1.5$ sprocket hole far side. The lobes are labeled with 120° . A callout labeled '7' points to one of the lobes. A side view detail on the right shows a vertical profile with a total width of $\Phi 180 \pm 2$, a central slot width of $\Phi 80 \pm 1$, and a height of 13.5 ± 0.5 above the base, and 17.5 ± 1 from the bottom.

The diagram shows a cross-section of a reinforcement collar. The top surface has a hatched pattern. A rectangular cutout on the right side is labeled 'Tape and reel pocket' with a leader line. A circular callout '8' points to the right edge of the collar. The left edge of the collar is labeled 'Reinforcement collar' with a leader line. The word 'Taping' is written above the top edge of the collar.

- 6 . 1,000 connectors per reel.
- 7 . The dimensions in parentheses are only for reference.
- 8** ➤ Refer to IEC 60286-3
(Packaging of components for automatic handling)
- 9** ➤ The reinforcing collar is wrapped around the emboss tape and taped down at the end of the collar.

10. Please refer to the product guideline ETAD-H1016 for detail of connector handling.

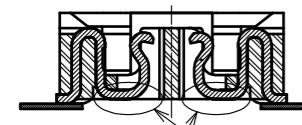
A The position between the connector and PAD



B Caution for soldering

There is metal exposure area bottom of the connector.

To avoid solder wicking from the bottom side, please design PCB PAD and stencil with recommended dimensions.



C Mating method

Please mate the connector by hand.

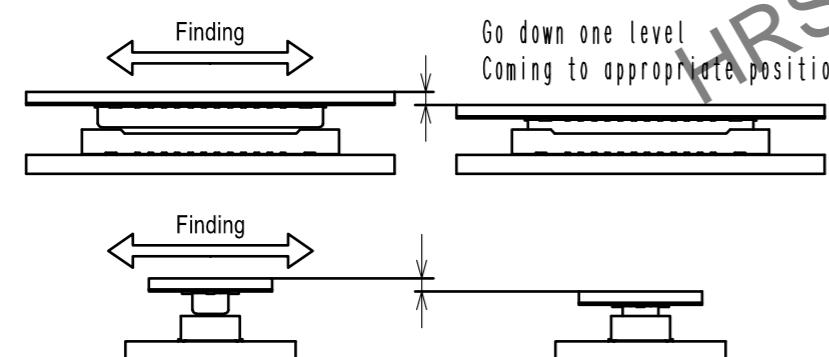
Mating procedure

(1) Find the alignment area to the connector in the appropriate mating position.

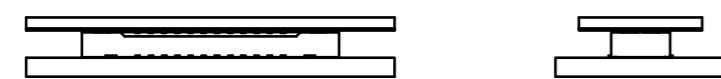
This connector has an alignment chamber (guidance ribs) on receptacle side and "T" on plug side, so that the connector will be self-aligned.

When the connector comes to the appropriate position, the connector goes into the aligned position.

When aligned, it can be felt by hand.



(2) When guiding, the connectors are aligned parallel to each other, with longitudinal and lateral movements restricted. Mate them properly by applying force in this condition.

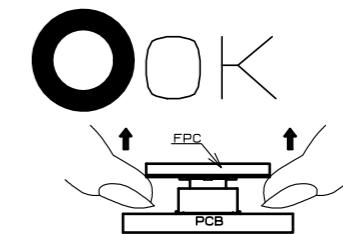
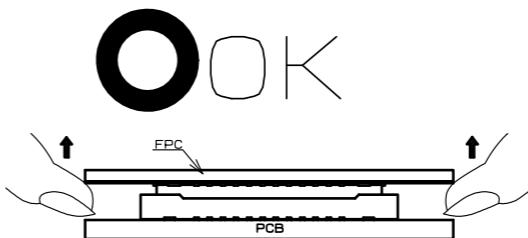


(3) Make sure the connectors are mated correctly. If one side is floating or the connectors are mated in one direction, un-mate them once, and then mate them again, following the procedures above from the beginning.

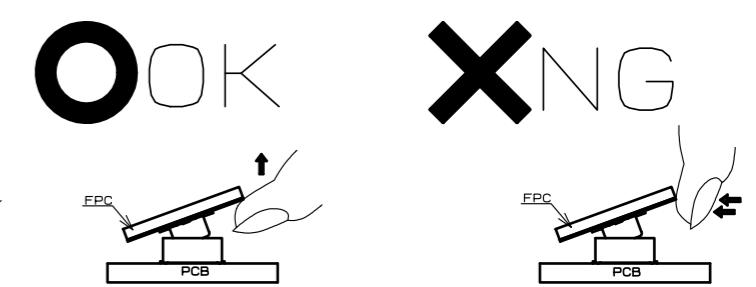
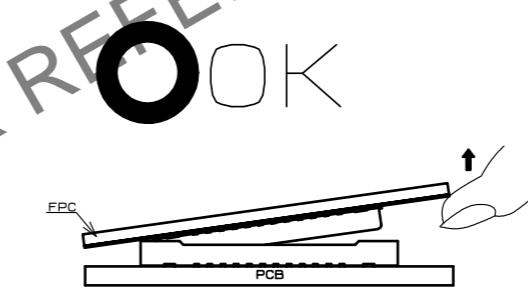
A Un-mating method

Please un-mate the connector by hand

(1) Un-mate the connectors parallel to each other. However, if the connectors have high pin counts or thinner FPC and stiffener, it becomes more difficult to do so.



(2) If the connector cannot be un-mated parallel it can be removed diagonally from the pitch direction. Be careful to do so since this action applies stress on the contact.



(3) If the FPC is not rigid, the connector can be broken. Please check the action of the FPC to be used repeatedly at the time of trial production. Be careful to un-mate them from the pitch direction, pulling it from the corner can also risk to putting stress on contacts.

