DESCRIPTION

MOUNTING STRUCTURE FOR CHIP COMPONENT

TECHNICAL FIELD

[0001] The present disclosure relates to a mounting structure for a chip component.

BACKGROUND ART

[0002] Conventionally, as a method of mounting an electronic component on a printed wiring board, a flow soldering method and a reflow soldering method are well known.

[0003] Patent Literature 1 discloses a flow soldering method. A printed wiring board used in the flow soldering method includes: a substrate formed with a substrate electrode on which various circuit elements are surface mounted and an opening into which a lead terminal of a lead component is inserted; and a sheet member that is peelable and formed with an opening at a position corresponding to the opening of the substrate. Then, an adhesive layer having adhesiveness is formed at a predetermined position other than the substrate electrode formed on the substrate, and the surface on which the adhesive layer is formed is covered with the sheet member.

[0004] Patent Literature 2 discloses a reflow soldering method. A mounting structure for this reflow soldering method is a mounting structure for a chip component, the structure formed by soldering terminal electrodes at both ends of the chip component to two lands on a printed wiring board. In this mounting structure, the two lands formed on the printed wiring board are conductor films having a shape in which a part of opposite sides of a circular shape is cut off and two sides formed by the cutting are opposed to each other substantially in parallel.

Citation List

Patent Literature

[0005] PTL 1: Unexamined Japanese Patent Publication No. H8-116153

PTL 2: Unexamined Japanese Patent Publication No. 2007-194462

SUMMARY

[0006] The present disclosure provides a mounting structure for a chip component, the structure enabling stable adhesive printing on a printed wiring board and mounting and

disposing of a small chip component.

[0007] In one aspect, the mounting structure for the chip component according to the present disclosure comprises the chip component including both terminal electrodes, and two lands on a printed wiring board, the both terminal electrodes being soldered to the two lands by a flow soldering method. The chip component is a small surface mounted device (SMD) component having a size of 0.6 mm × 0.3 mm, and the dimension between the two lands is more than or equal to 0.23 mm and less than or equal to 0.25 mm.

[0008] The mounting structure for the chip component in the present disclosure enables stable adhesive printing on the printed wiring board mounted with the small SMD component (for example, 0.6 mm × 0.3 mm (0603 size)) that is a chip component, which has not been conventionally possible. This enables mounting and disposing of the small SMD component. By defining the dimension between the two lands, an adhesive printing defect can be eliminated and falling off of the small SMD component during flow soldering work can be eliminated.

BRIEF DESCRIPTION OF THE DRAWINGS

[0009] Fig. 1 is a plan view showing a mounting structure for a chip component in an exemplary embodiment.

Fig. 2 is a plan view showing another mounting structure for a chip component in the exemplary embodiment.

DESCRIPTION OF EMBODIMENT

[0010] (Knowledge and the like underlying the present disclosure)

At the time when the inventors arrived at devising of the present disclosure, the flow soldering method has very high productivity.

[0011] With the recent downsizing of SMD components (surface mounted components), the size of the SMD components mounted on a printed wiring board has also been downsized. As an example, the SMD component surface area has become about half from 1.0 mm × 0.5 mm (1005 size) to 0.6 mm × 0.3 mm (0603 size).

[0012] Because, in the flow soldering method, the size limit of SMD components that can be subjected to flow soldering is 1.0 mm × 0.5 mm, there are an increasing number of small SMD components that cannot be mounted in the flow soldering method.

[0013] A major problem in mounting the small SMD component having an SMD