Claims

1. A composite probe, comprising:

a probe body housed in a guide unit of a probe card including a first guide plate and a second guide plate arranged apart from each other, and supported by a first guide hole of the first guide plate and a second guide hole of the second guide plate; and

a leader rod, one end of which is connected to the probe body, having a substantially straight shape, inserted through the first guide hole ahead of the probe body, further passing through the second guide hole, and detachable from the probe body after passing through the second guide hole, wherein

the probe body includes

a first rod having a substantially straight shape and supported by the first guide hole,

a second rod having a substantially straight shape and supported by the second guide hole, and

a curved portion disposed between the first guide plate and the second guide plate, and connecting the first rod and the second rod, and

the leader rod is connected to a tip of the second rod coaxially with the second rod, and

a total length of the leader rod and the second rod is greater than a distance between non-facing surfaces of the first guide plate and the second guide plate.

2. The composite probe according to claim 1, wherein

a length of the leader rod is greater than the distance between the non-facing surfaces of the first guide plate and the second guide plate.

3. The composite probe according to claim 1, wherein

a length of the leader rod is equal to or greater than a length of the probe body.

4. The composite probe according to any one of claims 1 to 3, wherein

the leader rod and the second rod are metal layers sequentially laminated by a plating method and bonded at interfaces approximately parallel to a lamination direction.

5. The composite probe according to any one of claims 1 to 3, further comprising:

a connecting portion connecting the leader rod and the second rod, wherein

the connecting portion is a metal layer laminated by a plating method, and a thickness in a lamination direction is smaller than that of the leader rod and the second rod.

6. A method for attaching a probe to a guide unit of a probe card including a first guide plate and a second guide plate arranged apart from each other, comprising:

inserting a leader rod through a first guide hole of the first guide plate ahead of a probe body by using a composite probe constituted by the probe body and the leader rod, the probe body including a first rod supported by the first guide hole of the first guide plate, a second rod supported by a second guide hole of the second guide plate, and a curved portion disposed between the first guide plate and the second guide plate and connecting the first rod and the second rod, and the leader rod being connected to a tip of the probe body;

further inserting the leader rod, inserted through the first guide hole, through the second guide hole of the second guide plate, before the curved portion is inserted through the first guide hole; and

detaching the leader rod from the probe body while the probe body is supported by the first guide hole and the second guide hole.

7. A method for manufacturing a probe card, comprising:

using the method for attaching a probe according to claim 6 to attach a probe to a guide unit; and

attaching the guide unit to which the probe is attached to a wiring board.