CLAIMS

[Claim 1]

A multilayered transmission line plate comprising:

one pair of ground layers,

a differential wiring layer disposed between one ground layer and the other ground layer of the one pair of ground layers,

a first insulating portion disposed between the differential wiring layer and the one ground layer, and

a second insulating portion disposed between the differential wiring layer and the other ground layer,

wherein the first insulating portion has a resin layer, the first insulating portion or the second insulating portion has a fiber base material layer containing a fiber base material, a thickness of the first insulating portion is equal to or thinner than a thickness of the second insulating portion, and

the resin layer is a cured product of a thermosetting resin composition which includes (A) a maleimide group-containing compound containing (a1) a divalent group having at least two imide bonds and (a2) a saturated or unsaturated divalent hydrocarbon group.

[Claim 2]

The multilayered transmission line plate of claim 1, comprising an insulating layer (1-I) as the first insulating portion and an insulating layer (1-II) as the second insulating portion, wherein the insulating layer (1-I) is a resin layer and the insulating layer (1-II) is a fiber base material layer.

[Claim 3]

The multilayered transmission line plate of claim 1, comprising an insulating layer (2-I) as the second insulating portion and an insulating layer (2-II) as the first insulating portion, wherein the insulating layer (2-II) includes two or more layers of an insulating layer (2-IIA) and an insulating layer (2-IIB) laminated on the insulating layer (2-IIA), the insulating layer (2-I) is a fiber base material layer, the insulating layer (2-IIA) is a resin layer, and the insulating layer (2-IIB) is a fiber base material layer.

[Claim 4]

The multilayered transmission line plate of any one of claims 1 to 3, wherein (a2) the saturated or unsaturated divalent hydrocarbon group is a divalent aliphatic hydrocarbon group having 8 to 100 carbon atoms.

[Claim 5]

The multilayered transmission line plate of any one of claims 1 to 4, wherein (A) the maleimide group-containing compound is an N-aliphatic substituted maleimide group-containing compound.

[Claim 6]

The multilayered transmission line plate of claim 5, wherein the resin composition further includes an N-aromatic substituted maleimide group-containing compound.

[Claim 7]

The multilayered transmission line plate of any one of claims 1 to 6, wherein the fiber base material layer is a layer including a fiber base material and a resin composition, and a difference in dielectric constant between the fiber base material and the resin composition is 1.0 or less.

[Claim 8]

The multilayered transmission line plate of any one of claims 1 to 7, wherein the dielectric constant of the fiber base material is 5.0 or less.

[Claim 9]

A multilayered transmission line plate comprising:

one pair of ground layers,

a differential wiring layer disposed between one ground layer and the other ground layer of the one pair of ground layers,

an insulating layer (3-I) disposed between the differential wiring layer and the one ground layer, and

an insulating layer (3-II) disposed between the differential wiring layer and the other ground layer, wherein the insulating layer (3-II) has two or more layers of an insulating layer (3-IIA) and an insulating layer (3-IIB) laminated on the insulating layer (3-IIA), the insulating layer (3-I) is a resin layer, the insulating layer (3-IIA) is a resin layer, the insulating layer (3-IIB) is a fiber base material layer, and

the resin layer is a cured product of a thermosetting resin composition which includes (A) a maleimide group-containing compound containing (a1) a divalent group having at least two imide bonds and (a2) a saturated or unsaturated divalent hydrocarbon group.