CLAIMS

[Claim 1]

A heat shrinkable connecting component for connection of an insulated electrical wire including a conductor covered by an insulating layer, the heat shrinkable connecting component comprising:

a heat shrinkable tube having a melting point of 210°C to 250°C; and

a pair of sealing portions disposed at inner peripheral surfaces of the heat shrinkable tube at two end portions of the heat shrinkable tube,

wherein a sealing material of each of the sealing portions has shear viscosity of 1000 Pa·s to 2000 Pa·s at 250°C with a shear rate of 100/s and has shear viscosity of 7000 Pa·s to 70000 Pa·s at 215°C with a shear rate of 0.01/s.

[Claim 2]

The heat shrinkable connecting component according to claim 1,

wherein a main component of the heat shrinkable tube is an ethylene-tetrafluoroethylene copolymer, and

wherein the heat shrinkable tube has a storage modulus of 0.8 MPa to 2.8 MPa at 250°C to 280°C.

[Claim 3]

The heat shrinkable connecting component according to claim 1 or claim 2,

wherein the sealing material has a softening point of 90°C to 170°C.

[Claim 4]

The heat shrinkable connecting component according to claim 1, claim 2, or claim 3,

wherein a main component of the sealing material is a tetrafluoroethylene-hexafluoropropylene-vinylidenefluoride copolymer.

[Claim 5]

The heat shrinkable connecting component according to any one of claim 1 to claim 4,

wherein the sealing material contains an inorganic filler,

wherein the inorganic filler is silica, hydrotalcite, clay, or a combination thereof, and

wherein a content of the inorganic filler is 1.0 part by mass to 4.0 parts by mass

with respect to 100 parts by mass of a resin in the sealing material.

[Claim 6]

The heat shrinkable connecting component according to any one of claim 1 to claim 5,

wherein transmittance of infrared light having a wavelength of 1 μm in the sealing material is 1.0% to 30.0%.

[Claim 7]

The heat shrinkable connecting component according to any one of claim 1 to claim 6, further comprising:

a connection portion disposed at an inner peripheral surface of the heat shrinkable tube between the pair of sealing portions,

wherein a solder material of the connection portion has a melting point of 210°C to 240°C.

[Claim 8]

The heat shrinkable connecting component according to any one of claim 1 to claim 7,

wherein arithmetic average roughness Ra of a surface of the heat shrinkable tube is 0.10 μm to 2.00 μm.

[Claim 9]

A method of manufacturing a heat shrinkable connecting component, the method comprising:

disposing a pair of sealing portions at inner peripheral surfaces of a heat shrinkable tube at two end portions of the heat shrinkable tube,

wherein the disposing the sealing portions includes shrinking the heat shrinkable tube and fixing the sealing portions in place,

wherein the heat shrinkable tube has a melting point of 210°C to 250°C, and

wherein a sealing material of each of the sealing portions has shear viscosity of 1000 Pa·s to 2000 Pa·s at 250°C with a shear rate of 100/s and has shear viscosity of 7000 Pa·s to 70000 Pa·s at 215°C with a shear rate of 0.01/s.

[Claim 10]

The method of manufacturing a heat shrinkable connecting component

according to claim 9,

wherein the sealing material has a softening point of 90°C to 170°C.