【CLAIMS】

【Claim 1】

A signal transmission connector connected to an electronic device, for transmitting an electrical signal, the signal transmission connector comprising:

a plurality of signal transmission units in which multiple conductive particles are arranged in a thickness direction within an elastic insulating material so that the signal transmission units are connected to terminals of the electronic device;

an insulation unit supporting to insulate the plurality of signal transmission units by surrounding surroundings of the plurality of signal transmission units; and

a signal shielding unit configured in a form in which multiple conductive particles are dispersed within the elastic insulating material in order to shield an external noise signal, positioned adjacent to the plurality of signal transmission units, and positioned in a middle of the insulation unit so that the signal shielding unit is spaced apart from the plurality of signal transmission units with a gap between the signal shielding unit and each of the plurality of signal transmission units,

wherein the signal shielding unit has a triple shielding structure, comprising:

a block shielding unit in which the multiple conductive

particles are dispersed within the elastic insulating material, the block shielding unit having lower density of the conductive particles than the signal transmission unit,

a plurality of internal high-density shielding units each positioned within the block shielding unit, the internal high-density shielding unit having higher density of the conductive particles than the block shielding unit, and

an external high-density shielding unit positioned to surround edges of the block shielding unit, the external high-density shielding unit having higher density of the conductive particles than the block shielding unit.

【Claim 2】

The signal transmission connector of claim 1, wherein:

the insulation unit is made of an elastic insulating material, and

the elastic insulating material of the insulation unit is solidified in an integrated form along with an elastic insulating material of the signal shielding unit and an elastic insulating material of the signal transmission unit.

【Claim 3】

The signal transmission connector of claim 1, wherein an end of the internal high-density shielding unit is protruded from a surface of the block shielding unit.