

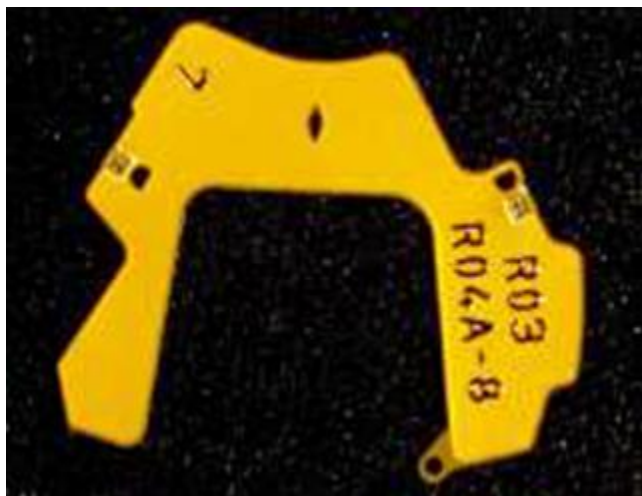
Genesis Macro RIC Antenna Description

The Genesis Macro RIC has two separate antennas, one for the 2.4 – 2.485 GHz Bluetooth radio and a second for the 10.281 MHz NFMI radio

2.4 GHz Bluetooth Antenna

The Bluetooth 2.4 GHz antenna is a printed flexible bowtie with a strap connecting the two arms that conforms to the shape of the hearing aid. The antenna is constructed on a polyimide flexible circuit. The flexible circuit uses 1 ounce copper (1.4 mil).

The peak gain of the antenna in the assembled DUT is -5.9 dBi.



unfolded antenna



Right side



Left side

Folded 2.4 GHz antenna assembled into hearing aid.

10.281 MHz NFMI antenna

The 10.281 MHz NFMI antenna is a coil wrapped on a ferrite core

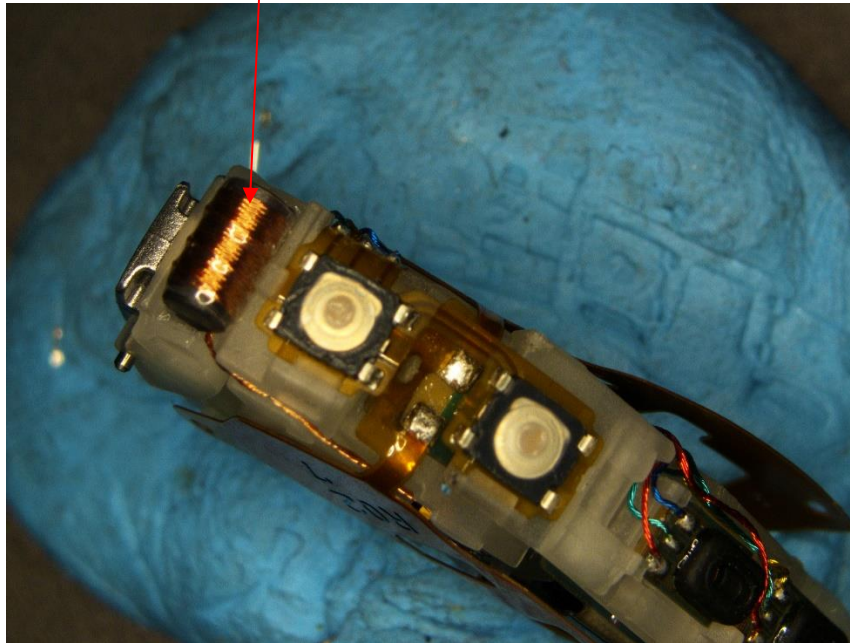


Figure 2 **NFMI Antenna**

The NFMI antenna coil is a cylinder of nominal radius 1.125 mm and length 4.2 mm. There are 21 turns going down the coil, and 3 turns coming back, which are needed because the wire feed is only along one end of the coil.