

NFC ATTINY ATECC

Monday, March 2, 2020 1:45 PM

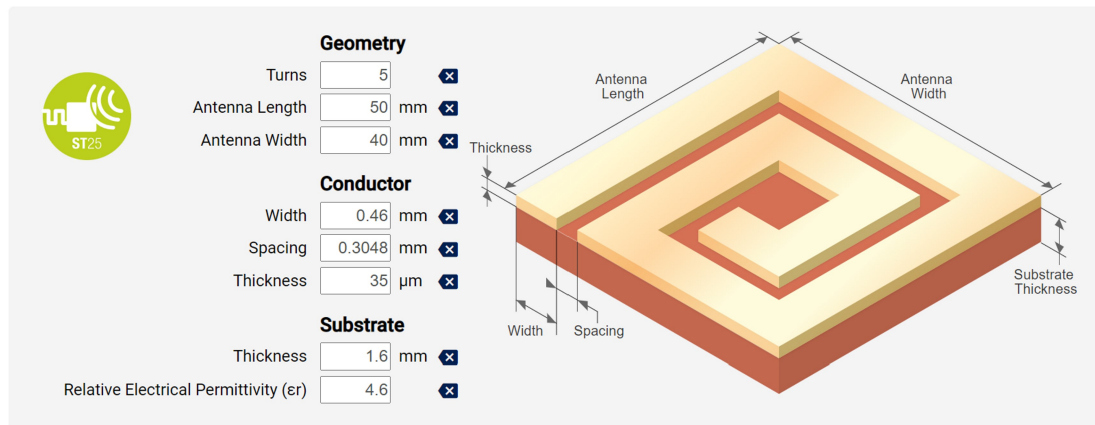
Calculation of loop inductance, chip capacitance is 50pF, frequency is 13.56MHz
(datasheet recommends designing for ~14.5MHz)

$$Q = \frac{R_{eq}}{2\pi fL}$$

$$f = \frac{1}{2\pi\sqrt{LC}}$$

$$L = \frac{25}{919368\pi^2} = 2.755\mu\text{H}$$

$$13.56 \times 10^6 = \frac{1}{2\pi\sqrt{50 \times 10^{-12} L}}$$

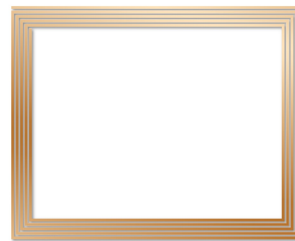


Antenna Results

Segmentation Mode: Vertical

Segments: 20

Equivalent Inductance: **2.75 μH**
@13.56 Mhz



Trace = 18mil

Space = 12mil

Thickness = 1oz copper