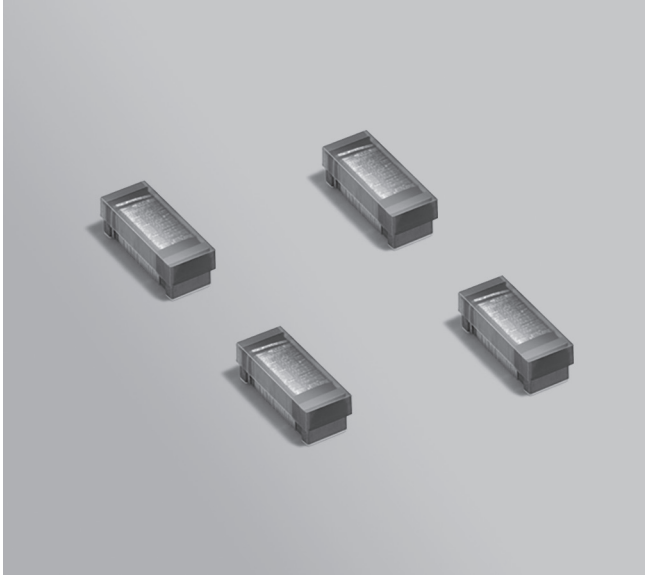




# NFMI Antenna Coil 2208NF (5520)



- Designed for Near Field Magnetic Induction (NFMI) for syncing earbuds/headphones, hearing aids, and other IoT wearable devices in audio data streaming applications
- Optimized for use at 10.579 MHz
- Small surface mount package, only 5.95 × 2.48 × 2.2 mm (L × W × H)

**Core material** Ferrite

**Environmental** RoHS compliant without exemption, halogen free

**Terminations** RoHS compliant matte tin over nickel over silver-platinum-glass frit.

**Weight** 0.1 g

**Ambient temperature** -40°C to +85°C with Irms current

**Maximum part temperature** +100°C (Ambient + temperature rise)

**Storage temperature** Component: -40°C to +100°C.

Tape and reel packaging: -40°C to +80°C

**Resistance to soldering heat** Max three 40 second reflows at +260°C, parts cooled to room temperature between cycles

**Temperature Coefficient of Inductance (TCL)** +25 to +150 ppm/°C

**Moisture Sensitivity Level (MSL)** 1 (unlimited floor life at <30°C / 85% relative humidity)

**PCB washing** Tested to MIL-STD-202 Method 215 plus an additional aqueous wash. See [Doc787\\_PCB\\_Washing.pdf](#).

Part number <sup>1</sup>	Inductance <sup>2</sup> ±5% (µH)	Q typ <sup>3</sup> @ 10.579 MHz	SRF typ <sup>4</sup> (MHz)	DCR (mOhms) <sup>5</sup>		Irms (mA) <sup>6</sup> 15°C rise
				typ	max	
2208NF-372XJR_	3.7	80	200	660	710	410
2208NF-392XJR_	3.9	80	195	690	740	405

1. When ordering, please specify **packaging** code:

**2208NF-392XJRC**

**Termination:** R = RoHS compliant matte tin over nickel over silver-platinum-glass frit.

**Packaging:** C = 7" machine-ready reel, EIA-481 punched paper tape (1000 parts per full reel). Quantities less than full reel available: in tape (not machine ready) or with leader and trailer (\$25 charge).

D = 13" machine-ready reel, EIA-481 punched paper tape. Factory order only, not stocked (3500 parts per full reel).

2. Inductance measured at 10.579 MHz using a Coilcraft CCF1506 test fixture and Coilcraft-provided correlation pieces with an Agilent/HP 4286 impedance analyzer.

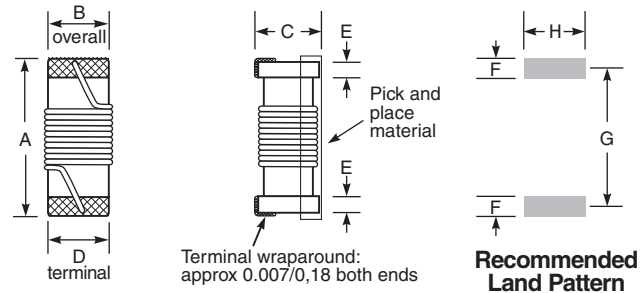
3. Q measured using an Agilent/HP 4991A.

4. SRF measured using Agilent/HP 8753D network analyzer and Coilcraft CCF1506 test fixture.

5. DCR measured on Cambridge Technology micro-ohmmeter and a Coilcraft CCF858 test fixture.

6. Current that causes a 15°C temperature rise from 25°C ambient.

Because of their open construction, these parts will not saturate. Refer to Doc 362 "Soldering Surface Mount Components" before soldering.



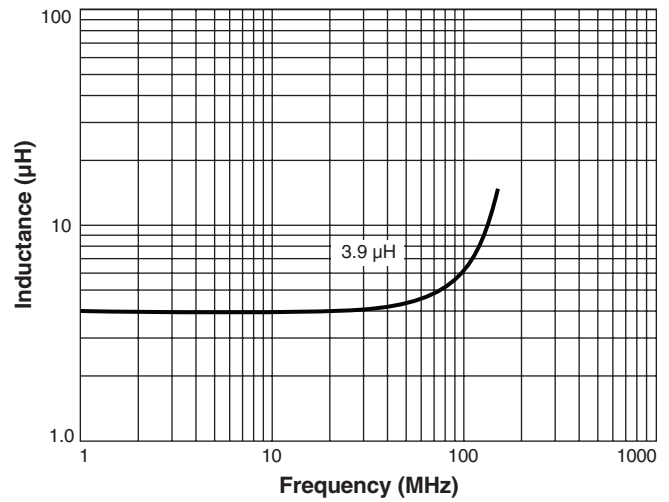
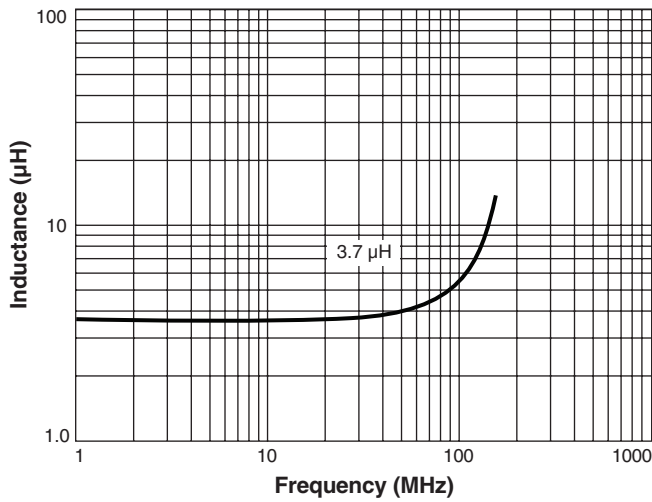
A max	B max	C max	D	E	F	G	H	
0.234	0.098	0.087	0.079	0.020	0.026	0.197	0.085	inches
5,95	2,48	2,20	2,00	0,50	0,65	5,00	2,15	mm

**Packaging** 1000 per 7" reel; 3500 per 13" reel. Paper tape: 12 mm wide, 0.23 mm thick, 8 mm pocket spacing, 2.26 mm pocket depth



# NFMI Antenna Coil – 2208NF

## Typical L vs Frequency



## Typical Q vs Frequency

