

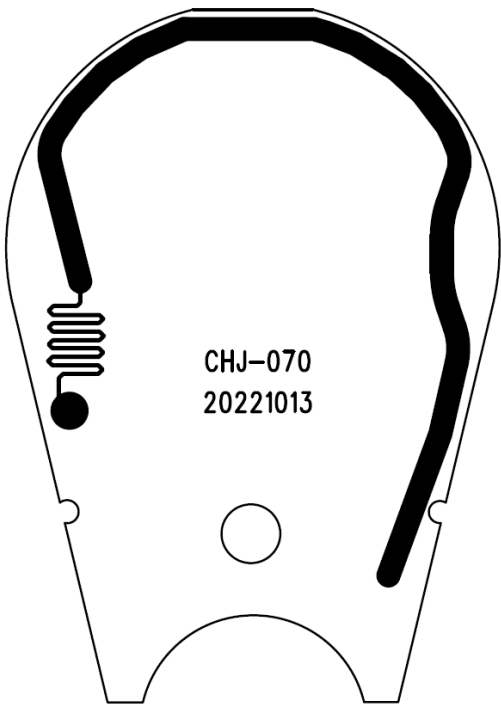
Board Antenna Specification

Summary

ITEM	ANT SPEC
Model Name	CHJ-070 433.92MHz ANT
Center Frequency	433.92 MHz
Gain Peak (rel.)	approx. -2.8 dB
Polarization	Linear
Azimuth Beam Pattern	Quasi omni-directional
Impedance	50 Ohm nominal
Antenna Form	Coupled printed perimeter radiator with meandered feed section
PCB Outline	32.90 x 22.74 mm
Main Radiator Span	approx. 25.96 x 19.30 mm
Main Trace Width	approx. 1.14 mm
Meander Feed Section	5.89 x 2.64 mm / path 25.82 mm / trace 0.203 mm

Mechanical geometry is derived from the supplied CHJ-070 Gerber artwork and the antenna drawing below. The perimeter radiator and the local meandered feed/coupling section are treated as one RF antenna system. Radiation values are engineering estimates for documentation and pre-compliance use; final OTA/chamber data shall prevail.

Antenna Structure



CHJ-070 PRINTED ANTENNA - SUPPLIED DRAWING

ANTENNA GEOMETRY

Topology	Coupled perimeter radiator
Feed section	Meandered coupling element
Main span	approx. 25.96 x 19.30 mm
Main trace	approx. 1.14 mm
Meander size	5.89 x 2.64 mm
Meander path	25.82 mm
Meander trace	0.203 mm
PCB outline	32.90 x 22.74 mm

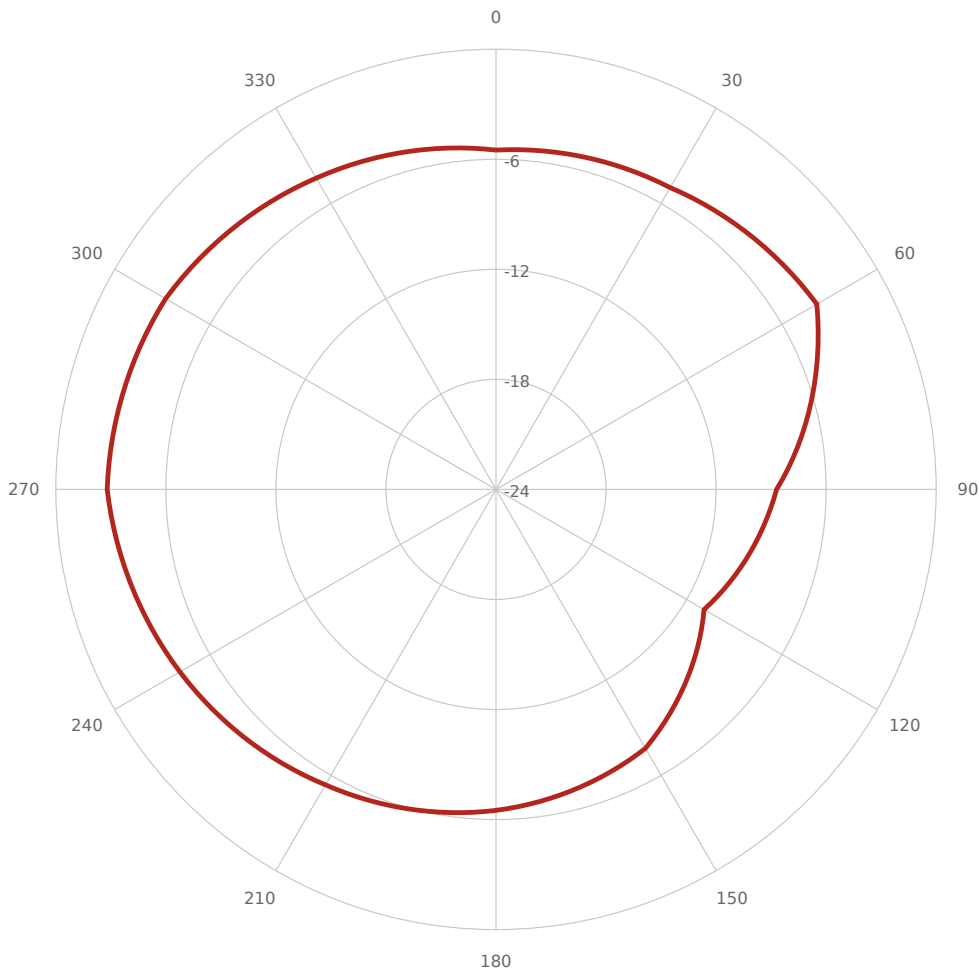
The supplied drawing is used directly to represent the antenna structure. The visible clearance between the meandered feed section and the perimeter trace is preserved as part of the RF coupling geometry.

Horizontal Radiation Pattern

Horizontal: **433.92 MHz**

Relative Level (dB)

Max: 0 Min: -24 Scale: 6/div



Frequency (MHz)	Pattern (dB) Max	Pattern (dB) Min	Pattern (dB) Avg
433.92	-2.8	-10.9	-5.6

Pattern values are conservative engineering estimates based on the supplied CHJ-070 printed antenna geometry, including the perimeter radiator and meandered feed/coupling section. The estimate allows for enclosure, PCB-ground and compact-handheld losses. Final OTA / chamber data shall prevail.

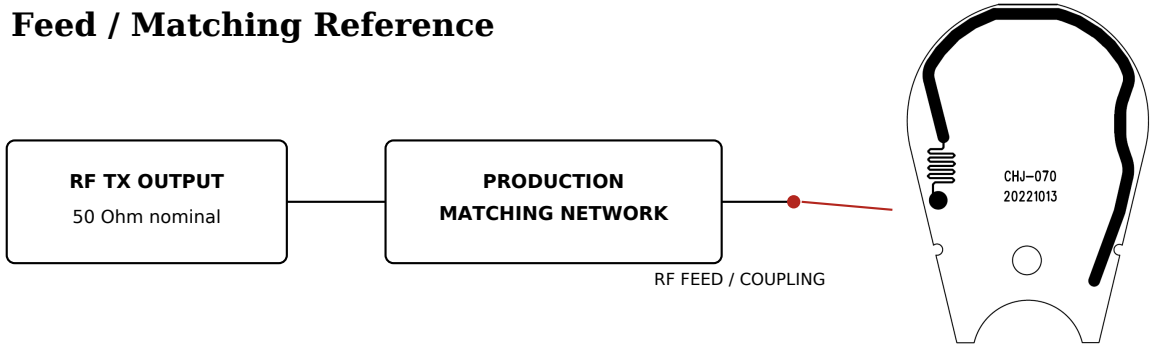
RF Matching / Layout Reference

Mechanical Parameters

ITEM	VALUE
Antenna Type	Coupled printed perimeter radiator with meandered feed section
Frequency	433.92 MHz
PCB Outline	32.90 x 22.74 mm
Antenna Layer	ART001 / top copper
Main Radiator Span	approx. 25.96 x 19.30 mm
Main Trace Width	approx. 1.14 mm
Meander Section	5.89 x 2.64 mm
Meander Path / Trace	25.82 mm / 0.203 mm

CHJ-070 PRINTED ANTENNA

RF Feed / Matching Reference



ITEM	VALUE / GUIDANCE
RF IC / PA	Defined by CHJ-070 production schematic / BOM; not encoded in Gerber artwork
Reference Impedance	50 Ohm nominal at RF feed
Matching Network	Use CHJ-070 production schematic / BOM matching values
Antenna Structure	Perimeter radiator with local meandered feed / coupling section
Coupling Geometry	Preserve spacing and relative placement shown in the supplied Gerber / drawing
Antenna Keep-out	Keep battery, metal, ground copper and large components away from the antenna region
Final Tuning	Verify S11 / VSWR and OTA performance on assembled PCB inside final enclosure

Mechanical geometry is derived from the supplied CHJ-070 Gerber package and antenna drawing. Matching-component values and final S11 / VSWR / OTA performance shall be verified against the CHJ-070 production schematic, BOM and assembled product.