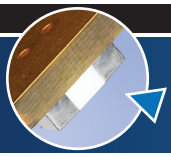


Miniature (Ceramic Chip)
RF Antennas

World Leader in Chip Antenna Design

"Not sure how to select the right antenna for your product design?"

Johanson chip antennas are constructed using a variety of techniques, including monopole, dipole, folded loop, inverted-F, and inverted L-designs. These are made using Low Temperature Co-Fired Ceramic technology which enables them to have great detuning resilience and extreme temperature stability (~2ppm) behavior.

Features:

- Various Bandwith Within 430MHz to 10GHz
- Smallest Form Factor Chip Available
- AEC-Q200 Automotive Qualified (As Required)

Benefits:

- Better resilience than PCB and whip Antennas
- Guaranteed resonance in mass production
- Design Review Available (for qualified customers)
- **OUR LAB SERVICE INCLUDES:**
  RF antenna egineer validating your prototype, complete RF tuning (with part numbers provided), anechoic chamber OTA (over-the-air) gain, efficiency, and radiation plots, &any last design optimization observations

Start with the. . .

Antenna Selection Guide Tool

An interactive, easy to use, step-by-step tool to help you get the correct antenna chip part number, for your project.

CHIP ANTENNA SELECTION GUIDE ▶ https://www.johansontechnology.com/chip-antenna-selection

Common Applications:

- IoT (Internet of Things)
- WiFi 6E and WiFi 7
- Amazon Sidewalk
- Wearable Devices
- Portable Audio
- Sensors
- Tag, Tracers, iBeacon
- Home Automation/RF Locks
- Advanced Thermostats
- POS/Payment Systems
- Telematics
- In-Vehicle WiFi
- WiFi Access Points
- Chipset Specific FEMs
- Portable Positioning Modules
- Vehicle/Insurance Tracking

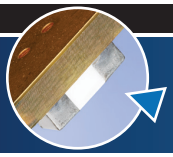
TUNING SERVICE ▶ https://www.johansontechnology.com/ipc-antenna-services

RF TEAM SERVICE ▶ https://www.johansontechnology.com/ask-a-question

RESOURCE ▶ https://www.johansontechnology.com/anten

Part Number	Frequency (MHz)	Peak Gain (dBi)
0433AT62A0020001E	423-443	-4.0
0433AT62A0020002E	423-443	-4.0
0490AT62A0040001E	470-510	-3.0
0783AT43A0008001E	779-787	-2.0
0830AT54A2200001E	700-800 1700-2100 824-960 1710-2690	2.0 2.0
0868AT43A0020001E	858-878	1.0
0868AT43A0020002E	858-878	1.0
0900AD47A2450001E	858-928 2400-2480	-1.0 2.5
0900AD54B2450001E	858-928 2400-2480	1.1 1.7
0900AT43A0070001E	858-928	-0.5
0915AT43A0026001E	902-928	-1.0
1227AT45A0042001E	1206-1249 (±21MHz)	1.0
1575AT43A0040001E	1561-1602	-1.5
1575AT44A0010001E	1570-1580	0.5
1575AT54A0010001E	1570-1580	1.3
1582AT54A0045001E	1560-1605	1.5
1600AT45A0040001E	1580-1620	0.0
1905AT45A0050001E	1880-1930	0.5
2000AT18A0075001E	1965-2040	0.3

Part Number	Frequency (MHz)	Peak Gain (dBi)
2440AT62A0085001E	2400-2485	3.5
2440AT62B0085001E	2440-2485	+2.1 typ. RHCP
2450AD14A5500001T	2400-2480 5150-5850	1.0 4.0
2450AD14A5500002T	2400-2480 5150-5850	1.0 4.0
2450AD18A6050001E	2400-2500 4900-5850 5850-7200	(+2.0 (YZ-plane)
2450AD18A6050002E	2400-2500 4900-5850 5850-7200	+1.9 +1.1 +3.0
2450AD18A7250001E	2400-2480 6000-8500	+3.0 +5.5
2450AD18A7250002E	2400-2480 6000-8500	+3.0 +5.5
2450AD46A5400001E	2400-2500 4900-5900	1.0 -1.5
2450AD47A1590001E	2400-2500 1561 1575 1602	1.0 0.5 1.5 1.5
2450AD47A1590002E	2400-2500 1561 1575 1602	1.0 0.5 1.5 1.5



Miniature (Ceramic Chip)
RF Antennas

Part Number	Frequency (MHz)	Peak Gain (dBi)
2450AT07A0100001T	2400-2500	1.0
2450AT07A0100001T	2400-2500	1.0
2450AT07A0100002T	2400-2500	1.0
2450AT14A0100001T	2400-2480	-0.5
2450AT18A0100001E	2400-2500	-0.5
2450AT18B0100001E	2400-2500	0.5
2450AT18D0100001E	2400-2500	1.5
2450AT18A0100002E	2400-2500	0.5
2450AT18D0100002E	2400-2500	1.5
2450AT18E0100001E	2400-2500	1.0
2450AT42A0100001E	2400-2500	0.0
2450AT42B0100001E	2400-2500	0.0
2450AT42D0100001E	2400-2500	0.5
2450AT42E0100001E	2400-2500	-2.0
2450AT42E0100002E	2400-2500	-2.0
2450AT42E010B001E	2400-2500	-1.0 -1.0
2450AT42E010B002E	2400-2500	1.0 -1.0
2450AT43A0100001E	2400-2500	Vertical -2.0 Horizontal -2.0
2450AT43A0100002E	2400-2500	Vertical -2.0 Horizontal -2.0

Part Number	Frequency (MHz)	Peak Gain (dBi)
2450AT43B0100001E	2400-2500	1.3
2450AT43B0100002E	2400-2500	1.3
2450AT43F0100001E	24500-2500	2.1
2450AT45A0100001E	2400-2500	2.2
2450AT45A0100002E	2400-2500	2.2
2500AT43A0100001E	2450-2550	0.6
2500AT44M0400001E	2300-2700	2.0 2.5 2.0
2600AT44A0600001E	2300-2900	2.0
2650AT43A0100001E	2600-2700	0.5
3100AT51A7200001E	3100-10300	1.5
3600AT43A0400001E	3.4-3.8	1.6
4000AT44A1800001E	3100-4900	2.7
5400AT18A1000001E	5150-5875	2.0 -2.5
5500AT07A0900001T	5150-5875 5350-5900	0.0 -3.0
5500AT18A0725001E	5150-5875	2.0
7000AT18A1600001E	6200-8240	2.0
7000AT18A1600002E	6200-8240	2.0