



Frontier Electronics 5SQ: High Q Adjustable Inductor



The 5SQ-XX series of tunable inductors was designed with a special bobbin and winding method to get a very high Q, the highest in the industry, in a wide range of frequencies. The 5SQ series along with high Q capacitors provide a very low insertion loss (minimizing the roll-off at the cut-off frequency) in low-pass, high-pass, and band-pass filters as well as in diplexers with very good stability over temperature.

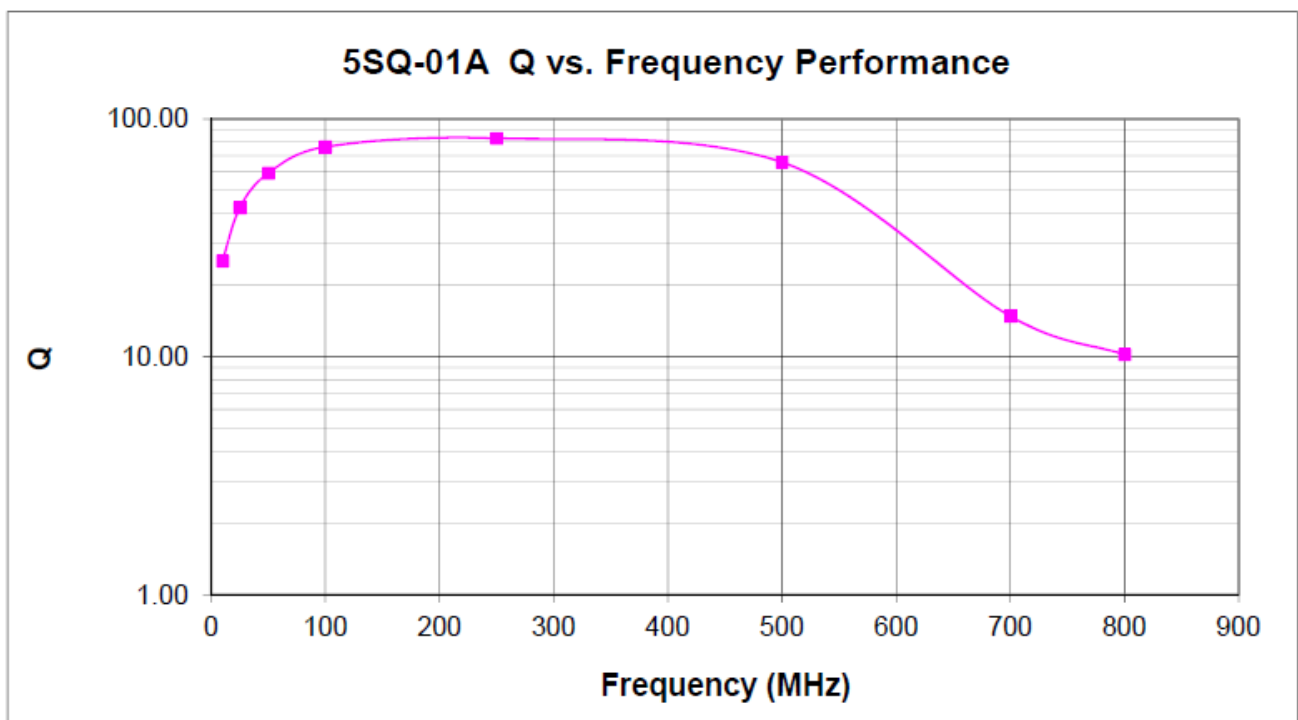
Typical applications include the above mentioned filters, tuner circuits and oscillators.

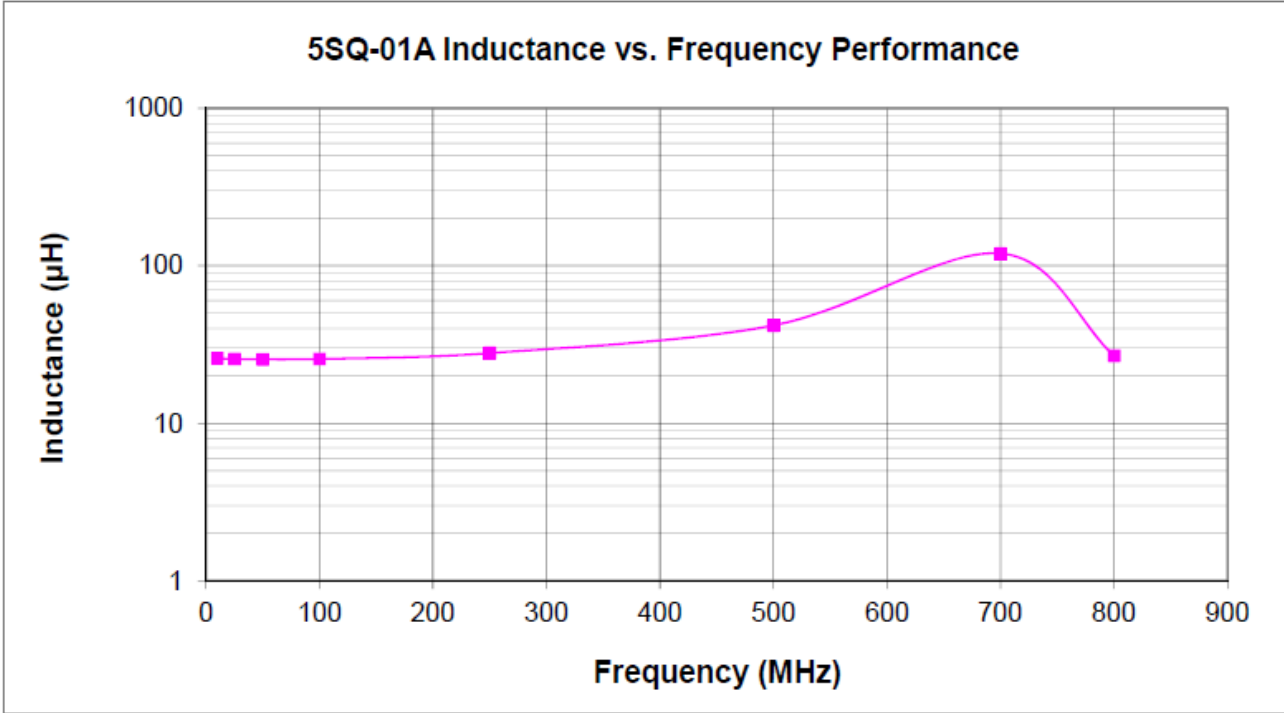
- a) Communication (Line extended, trunk amplifiers etc.)
- b) Radio Control (toy airplanes, toy helicopters, toy cars, boats, robots etc)
- c) High quality and narrow filter specifications (used in repeaters or cascade amplifiers)
- d) Military communication networks (similar to CATV)
- e) Medical devices (with non-magnetic core material)

Frontier Electronics has supplied over 50 million pieces of the 5SQ series to our customers and has not had any field failures since the product was introduced to the market.

General product information:

- a) Highest Q in the industry
- b) Inductance range: 0.0275 μ H to 0.53 μ H
- c) SRF from 450MHz to 1.45GHz





5mm Super High Q Tunable Inductor								
	Inductance (min μ H)	Inductance (nom μ H)	Inductance (max μ H)	Q (min)	Test Freq	SRF (min)	DCR (max Ω)	RoHS
5SQ -01A	0.0275	0.0285	0.0295	40	25.2MHz	1450MHz	0.03	YES
5SQ -02A	0.051	0.056	0.061	50	25.2MHz	1350MHz	0.035	YES
5SQ -03A	0.08	0.095	0.11	65	25.2MHz	1000MHz	0.035	YES
5SQ -03	0.085	0.095	0.105	70	25.2MHz	1000MHz	0.035	YES
5SQ -04	0.12	0.14	0.16	80	25.2MHz	900MHz	0.0455	YES
5SQ -05	0.15	0.175	0.2	90	25.2MHz	740MHz	0.05	YES
5SQ -06	0.185	0.225	0.265	90	25.2MHz	590MHz	0.0575	YES
5SQ -07	0.27	0.317	0.365	90	25.2MHz	540MHz	0.0725	YES
5SQ -08	0.32	0.383	0.445	100	25.2MHz	500MHz	0.075	YES
5SQ -09	0.4	0.465	0.53	100	25.2MHz	450MHz	0.085	YES

