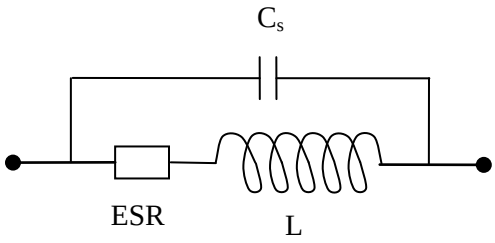
KTL-IC1 Very High-Q & High reactive power coil

Product Overview

The KTL-IC1 winding is made of 55 turns of German high-quality copper Litz wire. The Φ 110mm coil former is made of a single block of pure PTFE material. As a result, KTL-IC1 provides leading edge performances in terms of quality factor (Q>1000 from 500kHz up to 1.2MHz). This allows tackling extremely high reactive power levels for small input power levels. This component is designed for a wide range of laboratory didactic and R&D usages ranging from wireless sensors, wireless power transfer up to induction heating devices.

Equivalent schematic



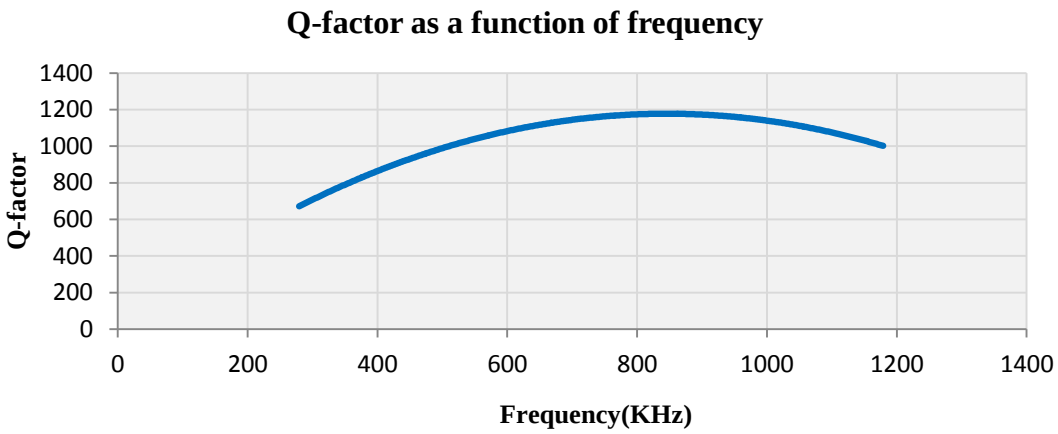
L	=	0.38mH
ESR	=	1.28Ω (at 600kHz)
C_s	=	6.5pF[2]

Typical performances

Inductance:	0.38 mH
DC resistance[1]:	0.79 Ω
AC resistance at 600 kHz[1]:	1.28 Ω
Self-resonance frequency:	3.85 MHz
Stray capacitance[2]:	4.5 pF
Q-Factors[1]:	>1000 from 500 kHz up to 1.2 MHz
Maximum coil voltage:	>10 kV
Maximum continuous input power[3]:	>10 W
Maximum continuous reactive power[3]:	>10 kVAr

[1] Measured at ambient temperature 25°C and low power levels
[2] This is the total equivalent capacitance; it corresponds to the mutual capacitance in parallel with the two self-capacitances in series. If a more accurate "π model" is required please contact us.
[3] Higher values are allowed if an appropriate cooling is provided

Typical frequency response curve



NOTICE: Specifications are subjected to change without notice. Contact us for the latest specification. All Statements, information and data given herein are believed to be accurate and reliable.