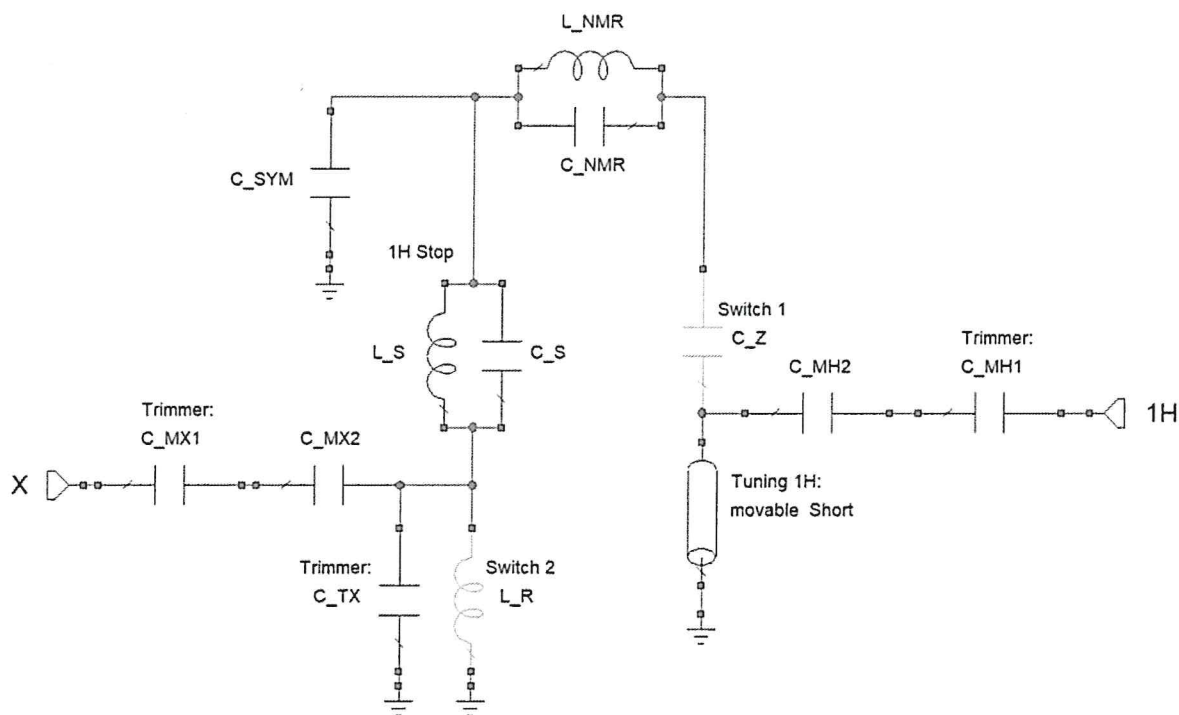


PROBE	PH MASDVT1000S6 BL1.9 X/H NO_I/E
Part No./ Serial No.	H170090-0001
KA Order No.	6290137
Ext. Order No.	409157/220 – University Warwick
Date	26.11.2020



## Schematic



## Table of Values

	Value	Part No.	Comment
L <sub>NMR</sub>	~ 37 pF	H137374	NMR Coil
C <sub>Sym</sub>	0.1 pF		Symmetry Capacitor
C <sub>Z</sub>	2.2 pF		Zeiger-C
TL		H178265	Transmission Line
C <sub>S</sub>	2.2 pF		Stop Circuit Capacitor
L <sub>S</sub>	~ 11.5 nH		Stop Circuit Inductor
L <sub>R</sub>	~ 10 nH		Range Coil
C <sub>MH1</sub>	1.0 – 5.0 pF	85812	<sup>1</sup> H Matching Capacitor 1
C <sub>MH2</sub>	1.2 pF		<sup>1</sup> H Matching Capacitor 2
C <sub>TX</sub>	1.0 – 25 pF	H165575	X Tuning Capacitor
C <sub>MX1</sub>	1.0 – 5.0 pF	85812	X Matching Capacitor 1
C <sub>MX2</sub>	5.6 pF		X Matching Capacitor 2

**Measured values (Low Range)**

Nucleus	1H	15N
X <sub>L</sub> / MHz	997.1	98
X <sub>H</sub> / MHz	> 1010	213
ΔF / MHz	17.8	3.6
Q	115	70
Isolation from/ dB		
1H	--	- 35.0
15N	- 39.4	--

**Measured values (Mid Range)**

Nucleus	1H	13C
X <sub>L</sub> / MHz	< 990	214
X <sub>H</sub> / MHz	> 1010	282
ΔF / MHz	15.9	10.1
Q	134	111
Isolation from/ dB		
1H	--	- 25.0
13C	- 47.0	--

**Measured values (High Range)**

Nucleus	1H	31P
X <sub>L</sub> / MHz	< 990	235
X <sub>H</sub> / MHz	> 1010	537
ΔF / MHz	13.9	2.8
Q	138	104
Isolation from/ dB		
1H	--	- 31.0
31P	- 42.7	--