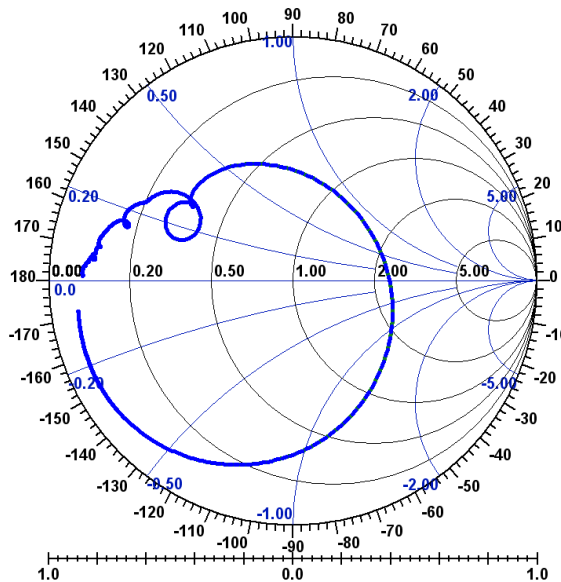


### SS2422BB2 Temperature sensor (1-port Resonator)

This product is lead-free in compliance with RoHs 2011/65/EU.

**Typical performance: S11 @ 23°C**



#### Test Conditions:

RF power	-10 dBm
Temperature	23.0 °C
DC Voltage	0 V
Terminating source impedance (Z <sub>S</sub> ):	50 Ω
Terminating load impedance (Z <sub>L</sub> ):	50 Ω

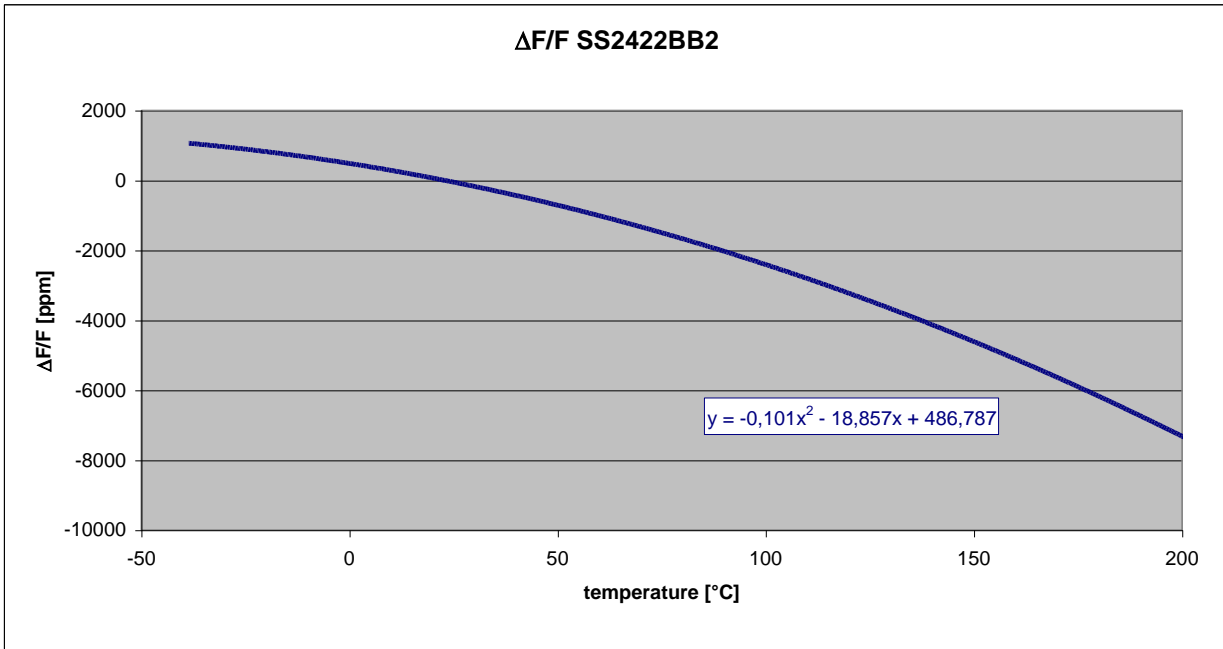
		min	typical	max	unit
Nominal frequency * <sup>1</sup>	F <sub>n</sub>	2422.30	2423.00	2423.70	MHz
Unloaded quality factor	Q <sub>U</sub>	7000	8750		
Ageing @200°C				-0.5	K/1000h
<b>Equivalent Circuit elements</b>					
Motional capacitance	C <sub>1</sub>		7.212		fF
Motional inductance	L <sub>1</sub>		597.53		nH
Motional resistance	R <sub>1</sub>		1.03		Ω
serial resistance	R <sub>0</sub>		2.8		Ω
Parallel capacitance	C <sub>0</sub>		0.685		pF
Operating temperature range		-40		200	°C
Temperature coefficient of frequency	TC <sub>F</sub>				
	α		-0.101		ppm/K <sup>2</sup>
	β		-18.86		ppm/K
	δ		486.8		ppm

**Electrostatic Sensitive Device**

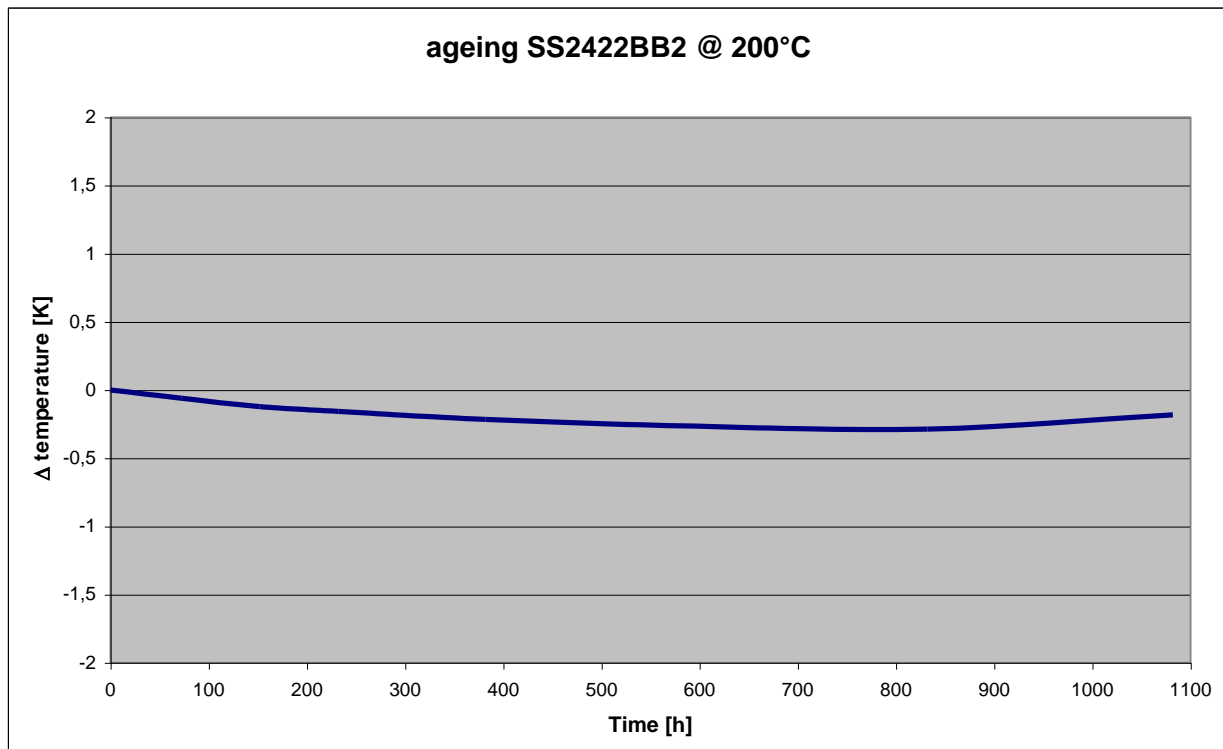
\*<sup>1</sup> Nominal frequency is defined as maximum impedance.

### Temperature coefficient of frequency

$$\Delta F/F_n = \alpha \cdot T^2 + \beta \cdot T + \delta \text{ with } T \text{ in } ^\circ\text{C}$$

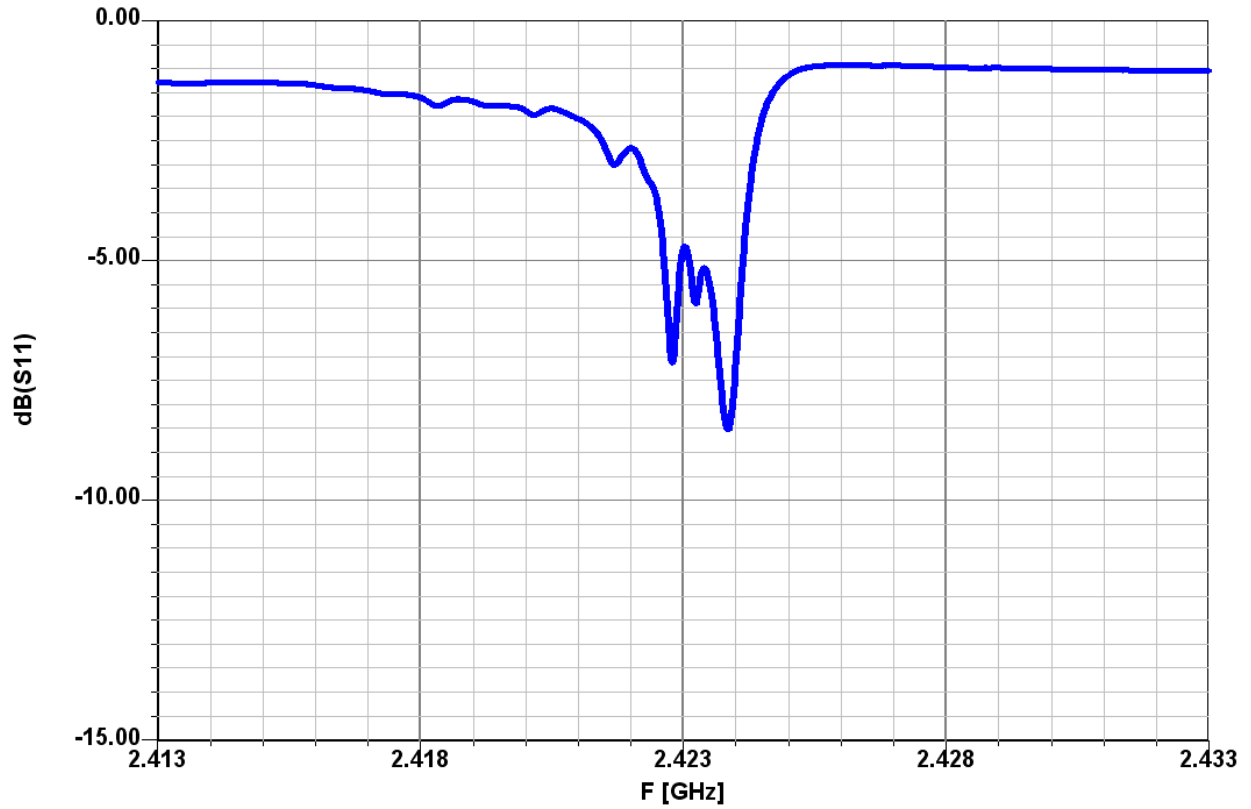


### ageing

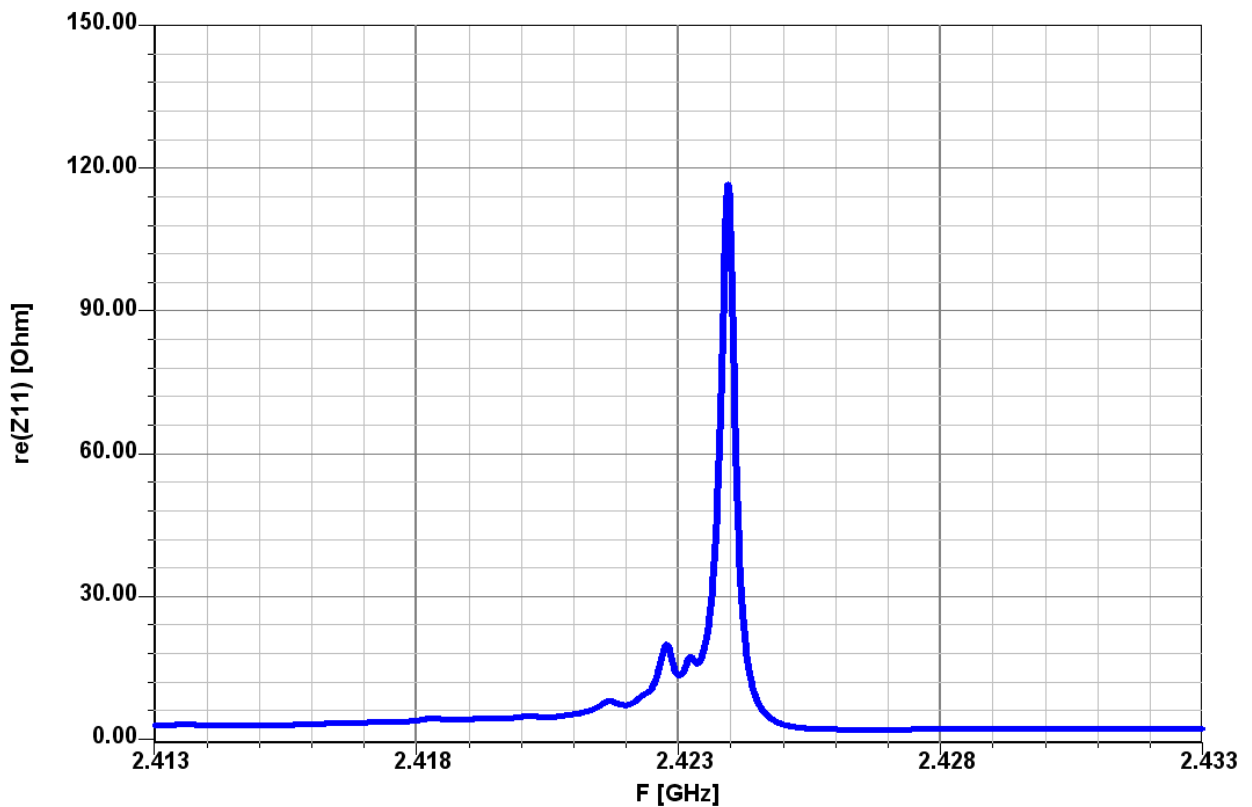


### Typical performance:

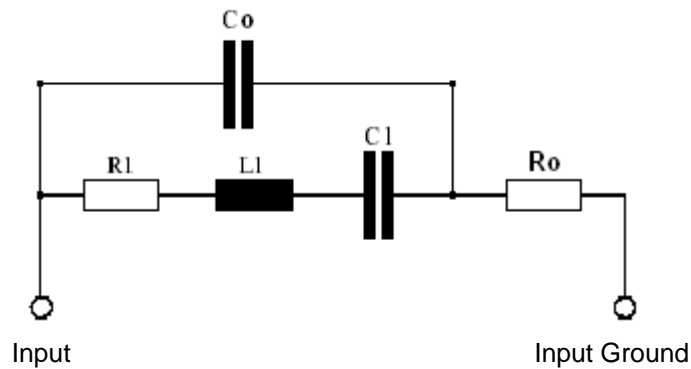
#### Magnitude:



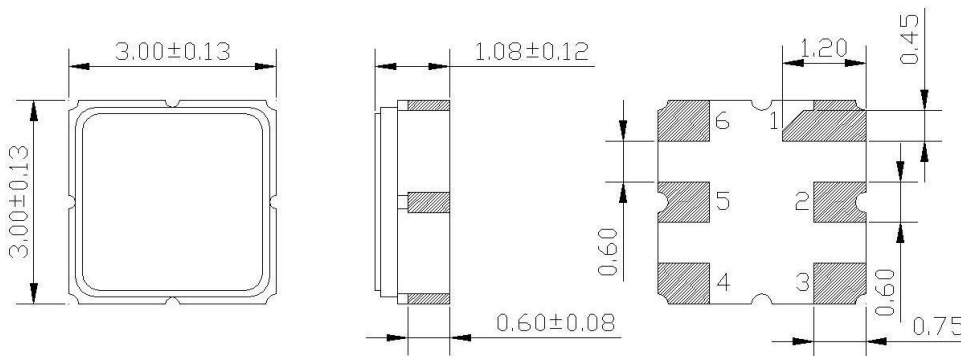
#### Impedance :



### Equivalent Circuit



### Package: S25 / 3.0\*3.0mm<sup>2</sup>



All dimensions in mm

Pin 1	Case ground	Pin 6	not connected
Pin 2	Antenna (Input/Ground)	Pin 5	Antenna (Ground/Input)
Pin 3	not connected	Pin 4	Case ground

### Marking

S...	Type
XXZZLL	Date code
XX	Year
ZZ	Calendar week
LL	Lot Number

