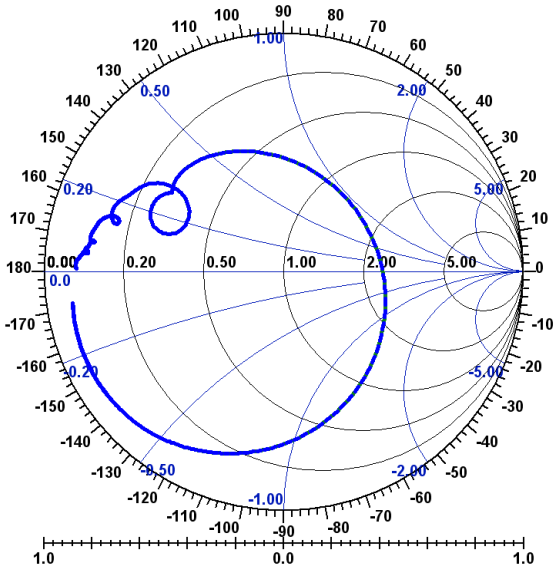
SS2414BB2 Temperature sensor (1-port Resonator)

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_S):	50	Ω
Terminating load impedance (Z_L):	50	Ω

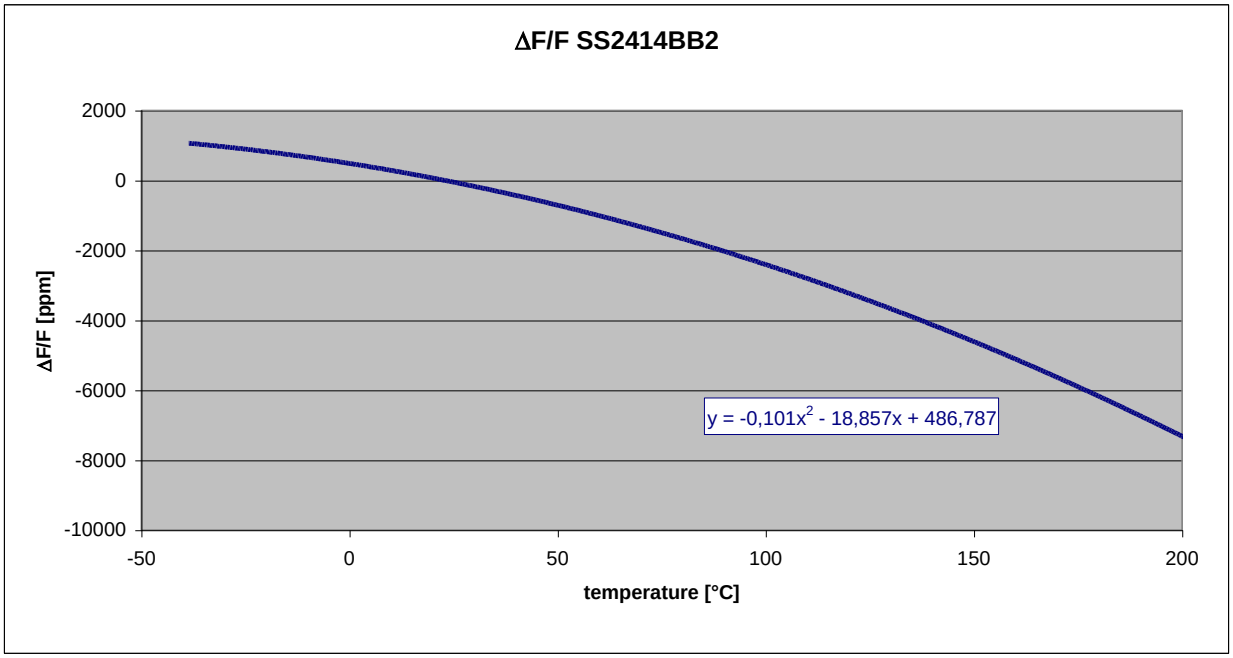
		min	typical	max	unit
Nominal frequency *[1]	F_n	2415.07	2415.77	2416.47	MHz
Unloaded quality factor	Q_U	7000	8750		
Ageing @200°C				-0.5	K/1000h
Equivalent Circuit elements					
Motional capacitance	C_1		7.212		fF
Motional inductance	L_1		601.23		nH
Motional resistance	R_1		1.03		Ω
serial resistance	R_0		2.8		Ω
Parallel capacitance	C_0		0.685		pF
Operating temperature range		-40		200	°C
Temperature coefficient of frequency α β δ	TC_F		 -0.101 -18.86 486.8		 ppm/K² ppm/K ppm

Electrostatic **S**ensitive **D**evice

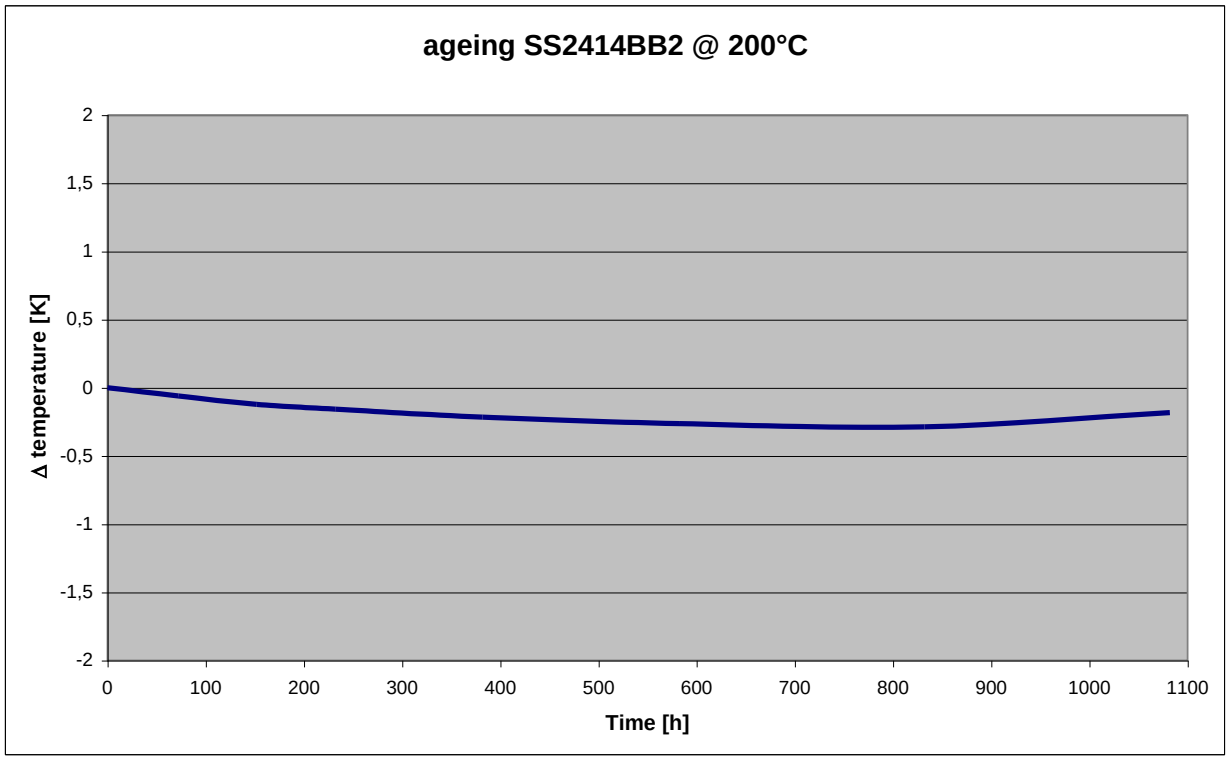
*[1] Nominal frequency is defined as maximum impedance.

Temperature coefficient of frequency

$\Delta F/F_n = \alpha * T2 + \beta * T + \delta$ with T in °C

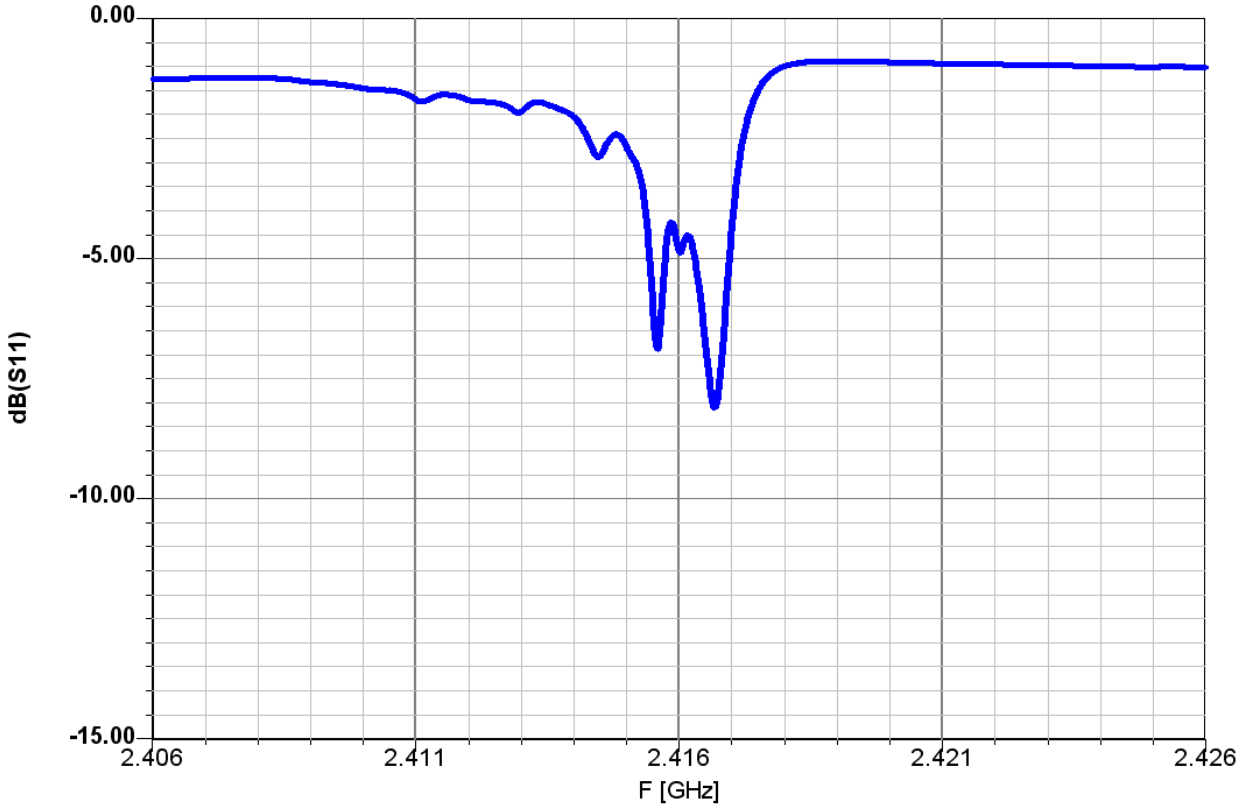


ageing

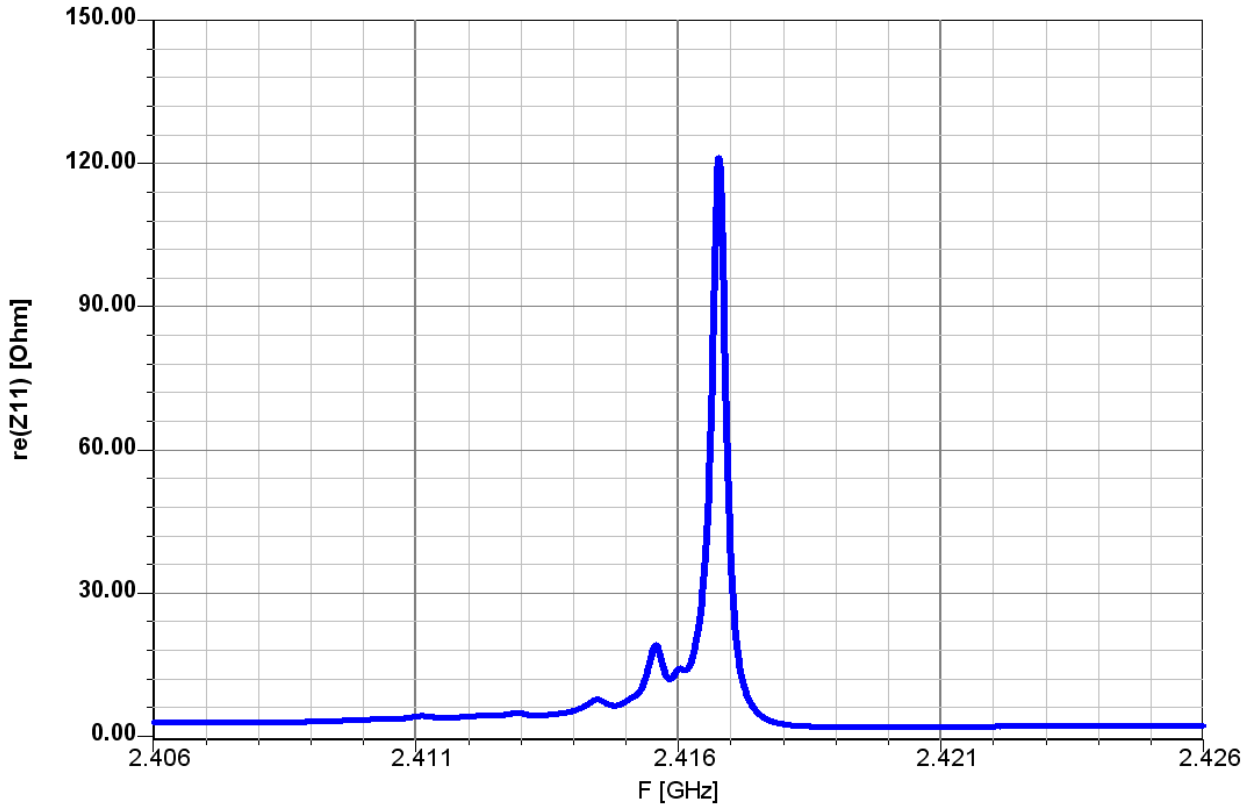


Typical performance:

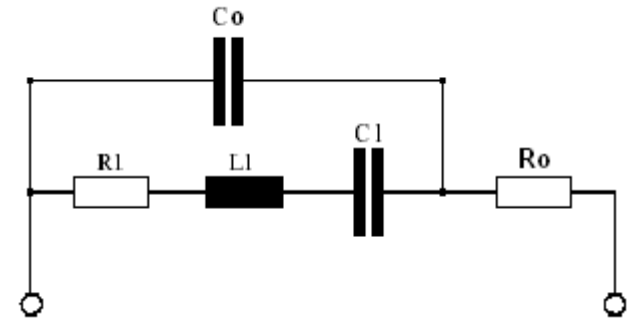
Magnitude:



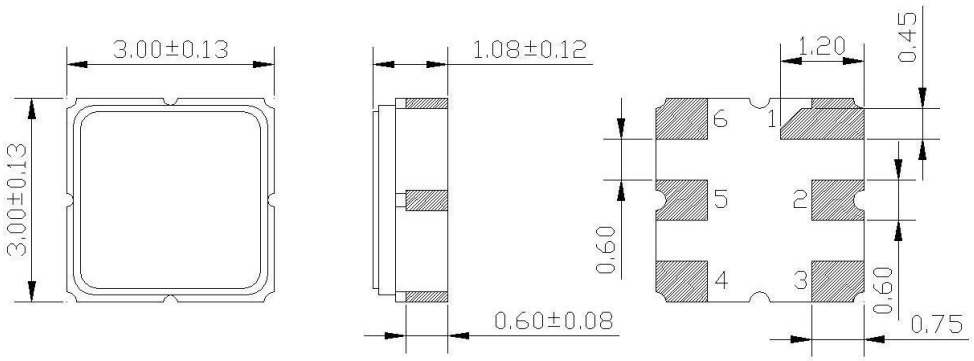
Impedance :



Equivalent Circuit



Package: S25 / 3.0*3.0mm²



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