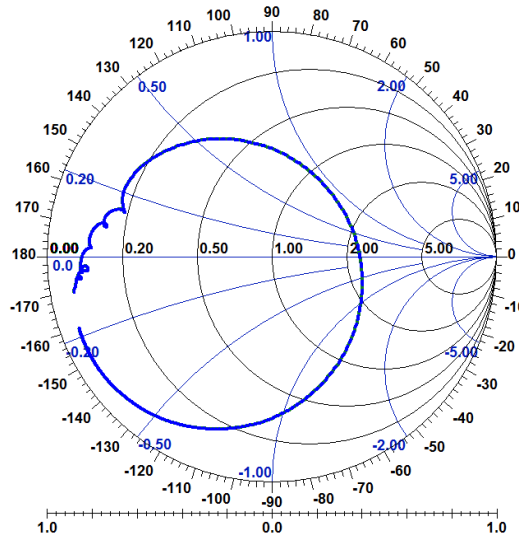


### SS2482BB3 Temperature sensor (1-port Resonator)

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 $\Omega$
Terminating load impedance ( $Z_L$ ):	50 $\Omega$

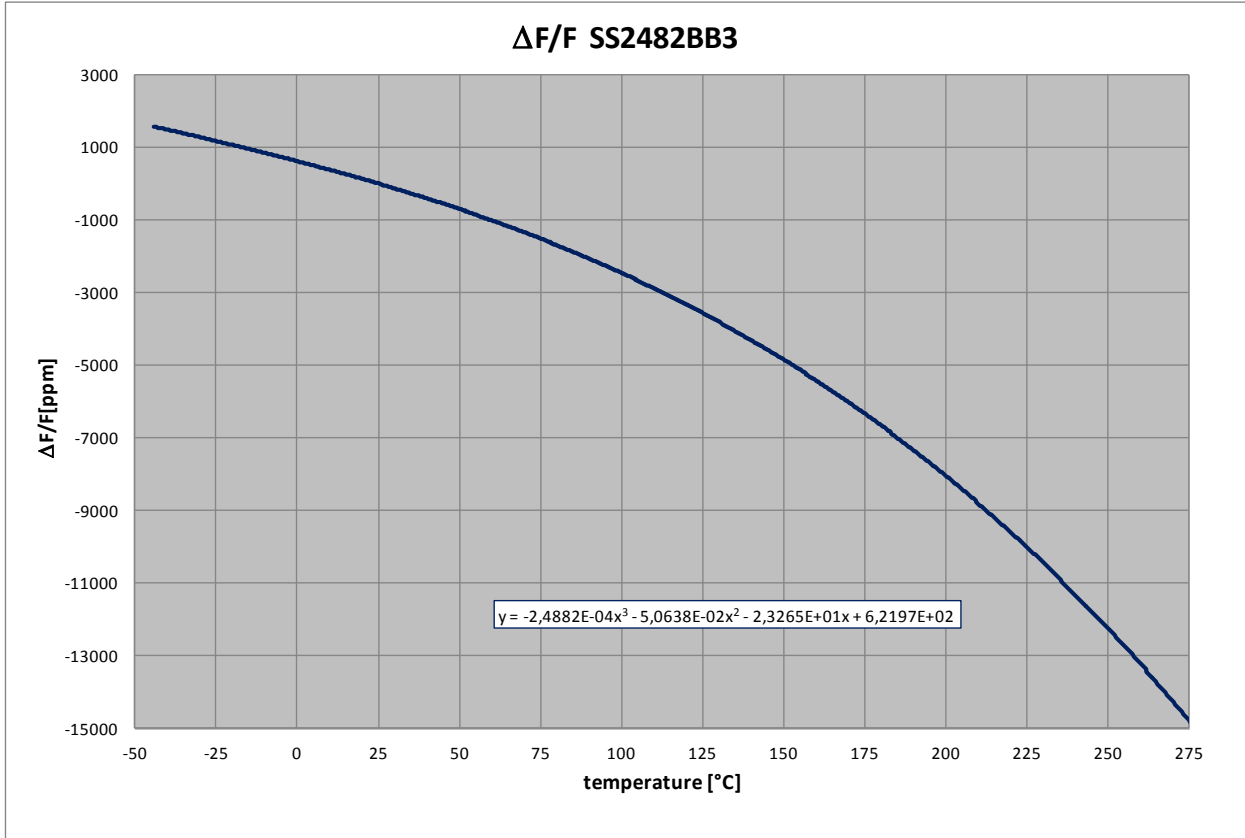
		min	typical	max	unit
Nominal frequency *1	$F_n$	2478.30	2479.00	2479.70	MHz
Unloaded quality factor	$Q_U$	5400	6700		
Ageing @200°C				1.2	K/1000h
<b>Equivalent Circuit elements</b>					
Motional capacitance	$C_1$		7.212		fF
Motional inductance	$L_1$		572.29		nH
Motional resistance	$R_1$		1.42		$\Omega$
serial resistance	$R_0$		2.2		$\Omega$
Parallel capacitance	$C_0$		5.0		pF
Operating temperature range		-40		275	°C
Temperature coefficient of frequency	$TC_F$				
	$\alpha$		$-2.49 \cdot 10^{-4}$		ppm/K <sup>3</sup>
	$\beta$		$-5.06 \cdot 10^{-2}$		ppm/K <sup>2</sup>
	$\gamma$		-2.32		ppm/K
	$\delta$		622		ppm

Electrostatic Sensitive Device

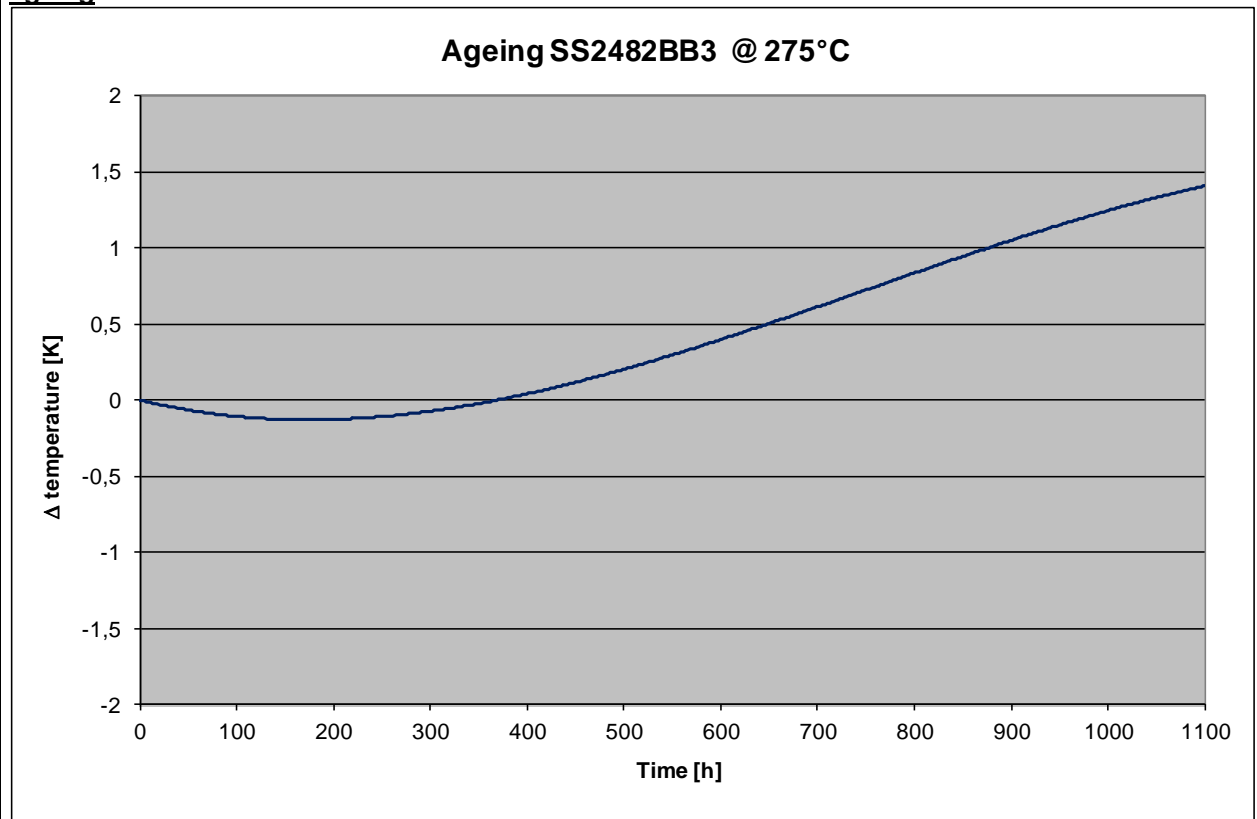
\*1 Nominal frequency is defined as maximum impedance.

## Temperature coefficient of frequency

$$\Delta F/F_n = \alpha * T^3 + \beta * T^2 + \gamma * T + \delta \text{ with } T \text{ in } ^\circ\text{C}$$

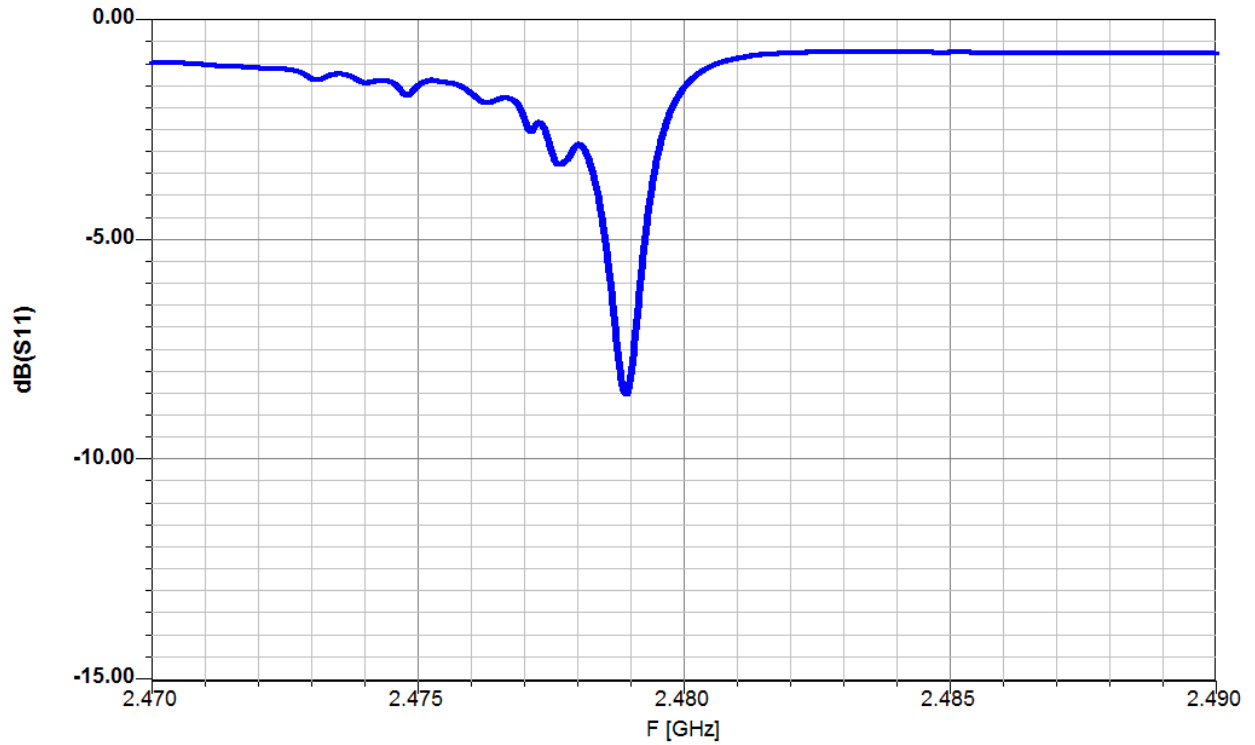


## ageing

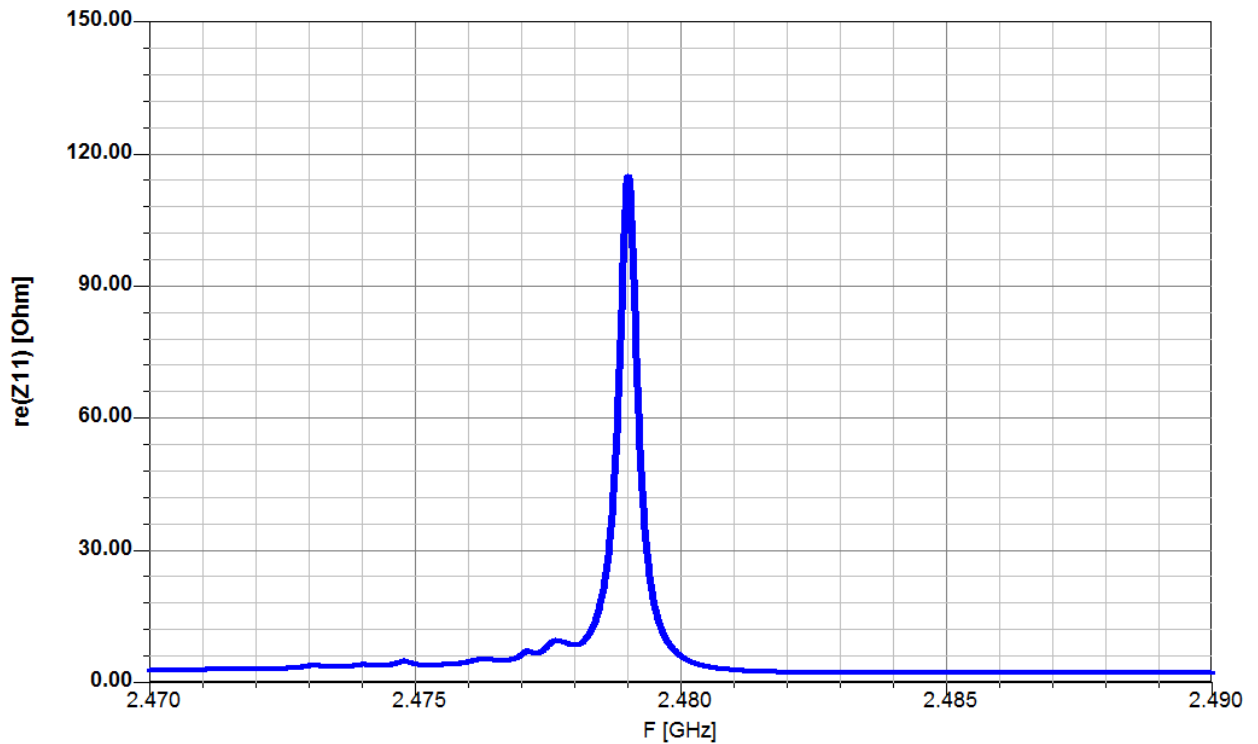


### Typical performance:

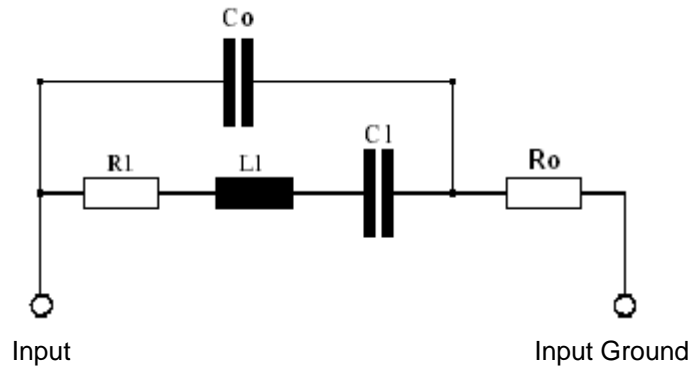
#### Magnitude:



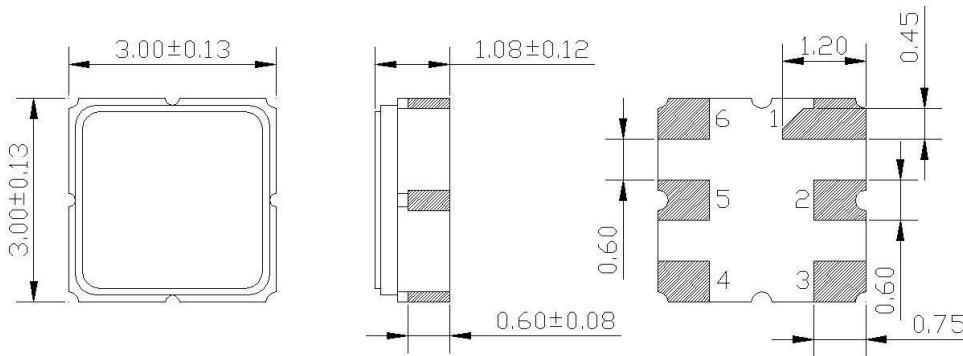
#### Impedance :



### 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

