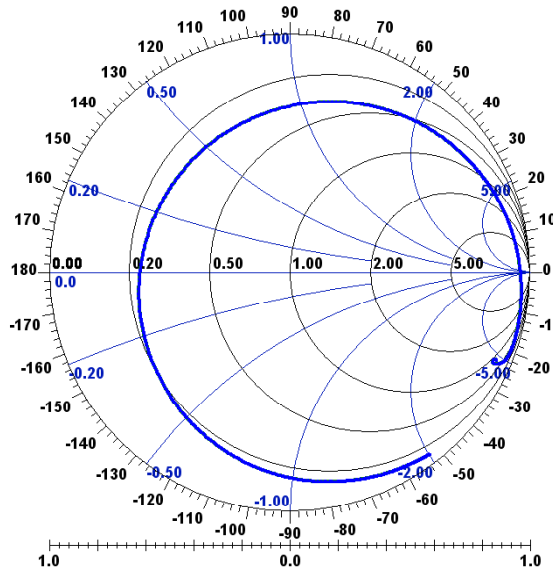


## SS434FO2 Temperature sensor (1-port Resonator)

This product is lead-free in compliance with RoHs 2002/95/EC.

**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 $\Omega$

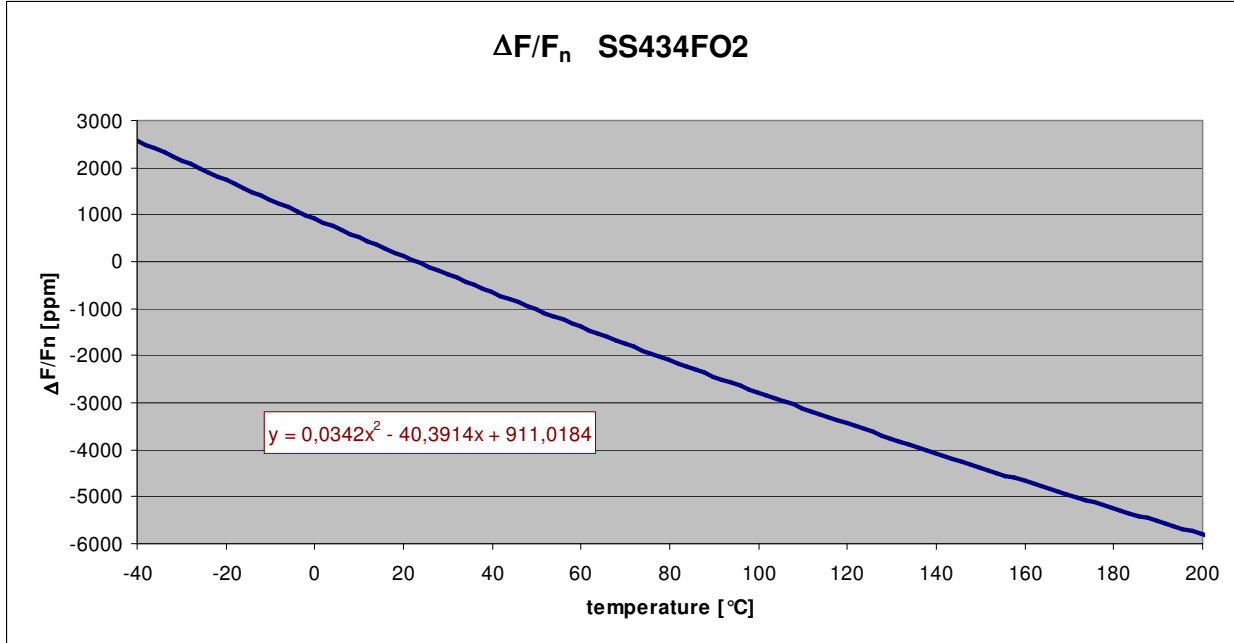
		min	typical	max	unit
Nominal frequency <sup>*1</sup>	$F_n$	434.275	434.290	434.305	MHz
Unloaded quality factor	$Q_U$	8500	12500		
Ageing @200°C				-0.8	K/1000h
<b>Equivalent Circuit elements</b>					
Motional capacitance	$C_1$		4.44		fF
Motional inductance	$L_1$		30.2564		$\mu$ H
Motional resistance	$R_1$		6.6		$\Omega$
serial resistance	$R_0$		5		$\Omega$
Parallel capacitance	$C_0$		2.5		pF
Operating temperature range		-40		200	°C
Temperature coefficient of frequency	$TC_F$				
	$\alpha$		-0.034		ppm/K <sup>2</sup>
	$\beta$		-40.4		ppm/K
	$\delta$		911.0		ppm

Electrostatic Sensitive Device

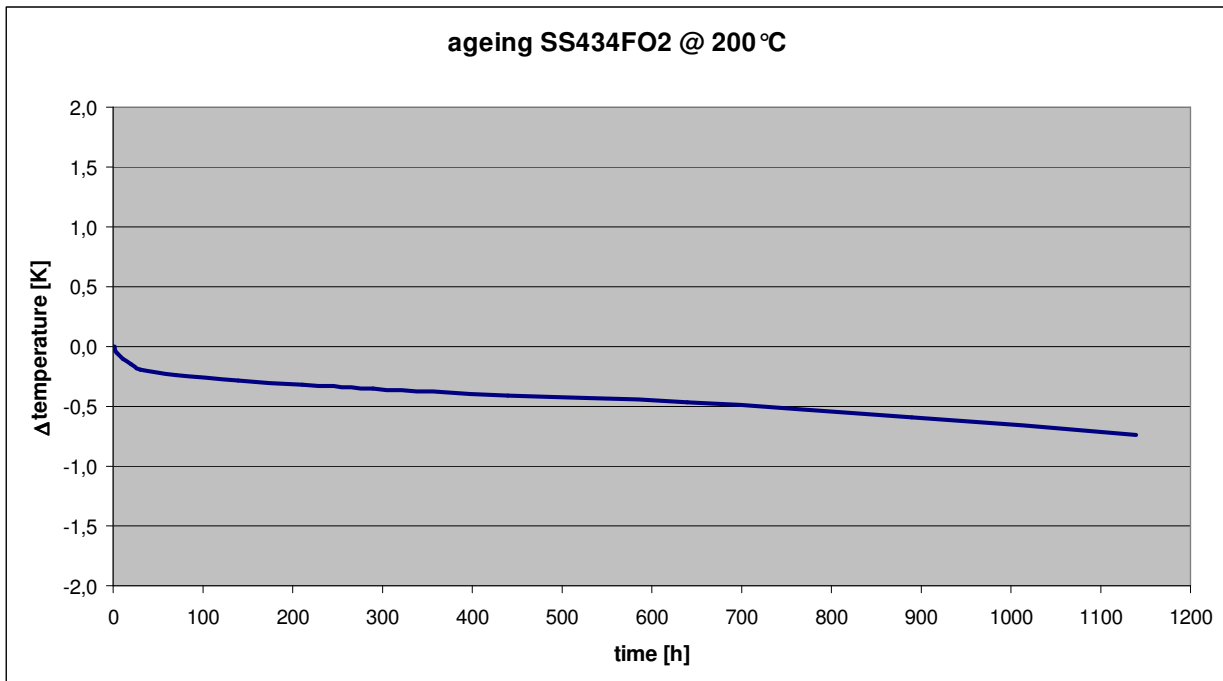
<sup>\*1</sup> Nominal frequency is defined minimum s11

## Temperature coefficient of frequency

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

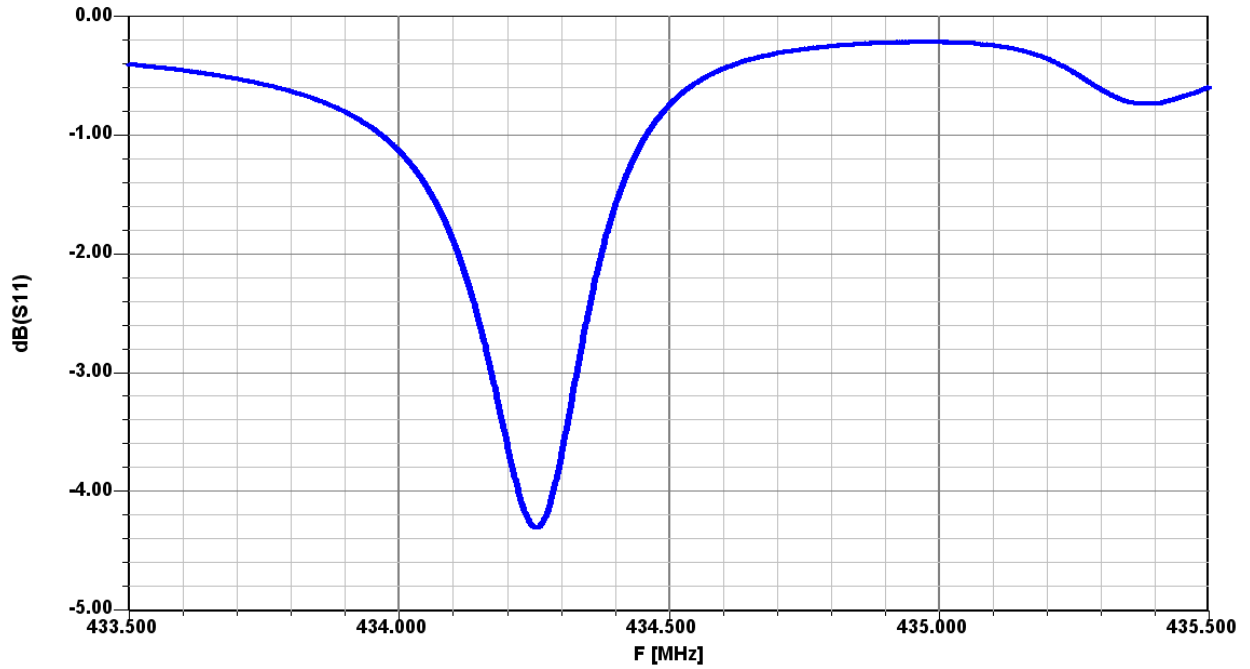


## ageing

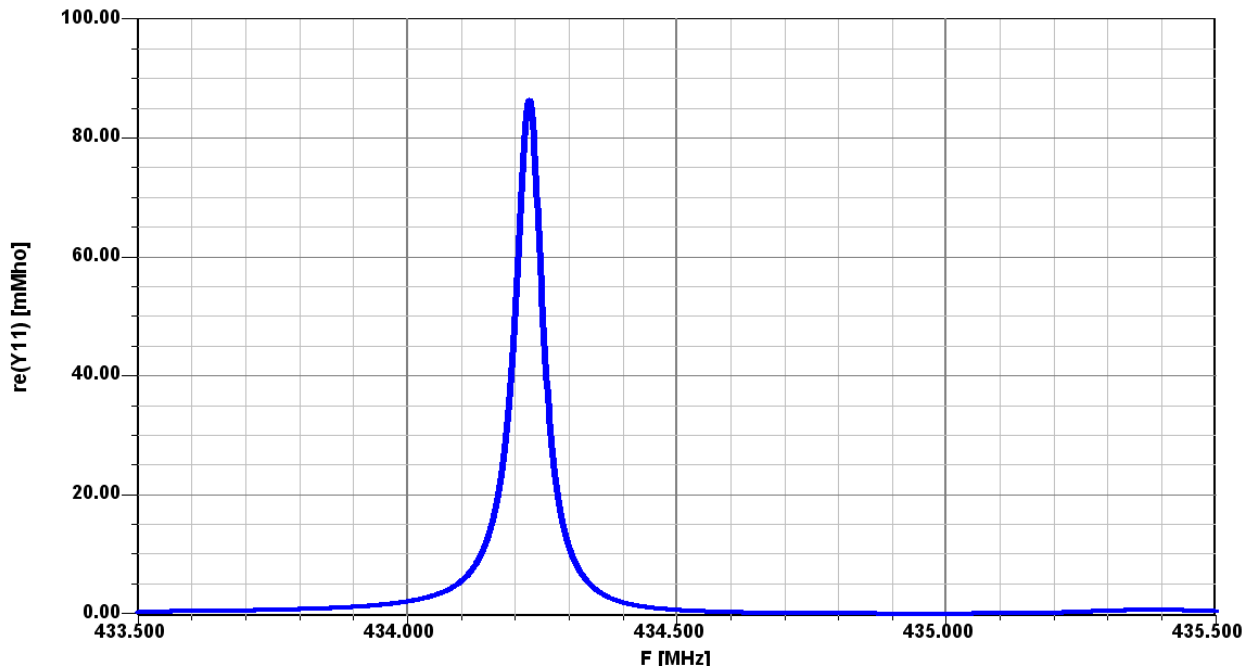


**Typical performance:**

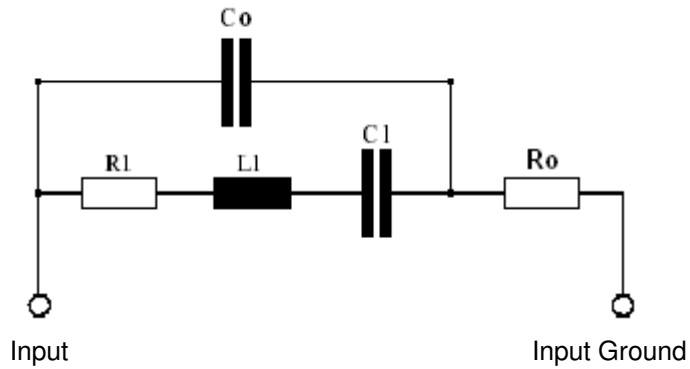
**Magnitude:**



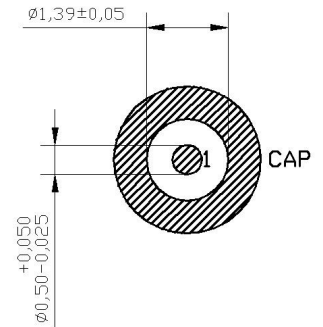
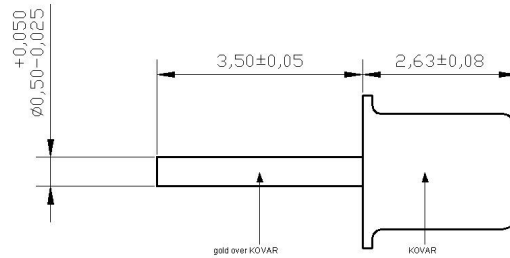
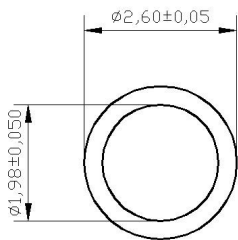
**Admittance :**



## Equivalent Circuit



## Package: TO25 / $\varnothing$ 2.0mm



All dimensions in mm

Pin 1 Antenna (Input)  
 Cap Ground