

# SAW Components

Preliminary Data R950





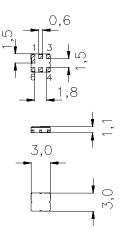
SAW Components	R950
Resonator	433,96 MHz
Preliminary Data	SMD

### Features

- 1-port resonator
- Provides reliable, fundamental mode, quartz frequency stabilization i.e. in transmitters or local oscillators
- Protection layer: ELPAS
- AEC-Q200 qualified components family

### Terminals

■ Ni, gold plated

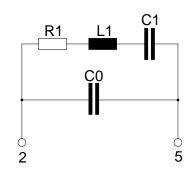


Ceramic package DCC6C

Dimensions in mm, approx. weight 0,037 g

#### **Pin configuration**

2	Input
5	Output, grounded in 1-port conf.
1, 3, 4, 6	Ground (case)



Туре	Ordering code	Marking and Package	Packing	
		according to	according to	
R950	B39431-R 950-U410	C61157-A7-A67	F61074-V8168-Z000	

Electrostatic Sensitive Device (ESD)

#### **Maximum ratings**

Operable temperature range	T <sub>A</sub>	-40/+125	°C	
Storage temperature range	T <sub>stg</sub>	-40/+125	°C	
DC voltage	V <sub>DC</sub>	12	V	between any terminals
Source power	Ps	0	dBm	

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Characteristics		
Reference temperature: Terminating source impedance: Terminating load impedance:	$T_{A} = 25 °C$ $Z_{S} = 50 \Omega$ $Z_{L} = 50 \Omega$	

		min.	typ.	max.	
Center frequency 1)	f <sub>c</sub>	433,910	433,960	434,010	MHz
Minimum insertion attenuation	$\alpha_{min}$	_	1,4	1,9	dB
Unloaded quality factor	$Q_{\cup}$	8300	12000	—	
Ageing of <i>f</i> <sub>c</sub>			_	-50/+50	ppm
Equivalent circuit elements					
Motional capacitance	$C_1$		1,685	_	fF
Motional inductance	$L_1$		79,82	_	μH
Motional resistance	$R_1$		18	26	Ω
Parallel capacitance <sup>2)</sup>	$C_0$	—	2,3	—	pF
Temperature coefficient of frequency <sup>3)</sup>	TC <sub>f</sub>	—	-0,032	—	ppm/K <sup>2</sup>
Turnover temperature	$T_0$	20	—	50	°C

<sup>1)</sup> Center frequency is defined as maximum of the real part of the admittance

 $^{2)}$  If used in two port configuration (pin 2-input, pin 5-output)  $\textit{C}_{0}$  is reduced by approx. 0,3 pF.

<sup>3)</sup>Temperature dependence of  $f_c$ :  $f_c(T_A) = f_c(T_0)(1 + TC_f(T_A - T_0)^2)$ 

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