

# SAW Components

Data Sheet R 852





SAW Components	R 852
Resonator	304,30 MHz

**Data Sheet** 

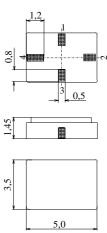
### Ceramic package QCC4A

#### **Features**

- 1-port resonator
- Provides reliable, fundamental mode, quartz frequency stabilization i.e. in transmitters or local oscillators

#### **Terminals**

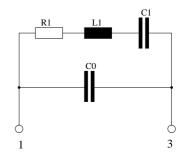
■ Ni, gold plated



Dimensions in mm, approx. weight 0,1 g

# Pin configuration

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



Туре	Ordering code	Marking and Package	Packing	
		according to	according to	
R 852	B39301-R 852-H210	C61157-A7-A86	F61074-V8120-Z000	

Electrostatic Sensitive Device (ESD)

## **Maximum ratings**

Operable temperature range	$T_{A}$	-40/+125	°C	
Storage temperature range	$T_{\rm stg}$	-40/+125	°C	
DC voltage	$V_{\rm DC}$	12	V	between any terminals
Source power	$P_{s}$	0	dBm	



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#### **Characteristics**

 $\begin{array}{ll} \text{Reference temperature:} & T_{\text{A}} & = 25 \, ^{\circ}\text{C} \\ \text{Terminating source impedance:} & Z_{\text{S}} & = 50 \, \Omega \\ \text{Terminating load impedance:} & Z_{\text{L}} & = 50 \, \Omega \end{array}$ 

		min.	typ.	max.	
Center frequency 1)	f <sub>C</sub>	304,25	304,30	304,35	MHz
Minimum insertion attenuation	$\alpha_{min}$	_	1,4	1,8	dB
Unloaded quality factor	$Q_{U}$	8000	13500	_	
Ageing of $f_{\rm c}$		_	_	-10/+50	ppm
Equivalent circuit elements					
Motional capacitance	$C_1$	_	2,17	_	fF
Motional inductance	$L_1$	_	126,06	_	μΗ
Motional resistance	$R_1$	_	18	23	Ω
Parallel capacitance 2)	$C_0$	_	3,0	_	pF
Temperature coefficient of frequency 3)	TC <sub>f</sub>	_	-0,032	_	ppm/K <sup>2</sup>
Turnover temperature	$T_0$	20	_	40	°C

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

 $<sup>^{2)}</sup>$  If used in two port configuration (pin 1-input, pin 3-output)  $C_0$  is reduced by approx. 0,3 pF.

<sup>&</sup>lt;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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