

# **SAW Components**

Data Sheet R 2707





SAW Components R 2707
Resonator 303,825 MHz

**Data Sheet** 

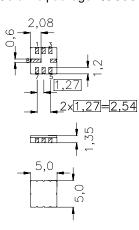
#### **Features**

- 2-port resonator
- nominal 180°-phase at resonance
- Provides reliable, fundamental mode, quartz frequency stabilization i.e. in transmitters or local oscillators

#### **Terminals**

■ Ni, gold plated

## SMD Ceramic package QCC8C



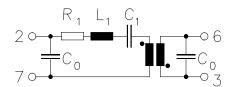
Dimensions in mm, approx. weight 0,1 g

#### Pin configuration

2	Input / Ouptput
6	Output / Input

7 Ground (Input / Output) 3 Ground (Output / Input)

4,8 Ground (case)



Туре	Ordering code	Marking and Package according to	Packing according to		
R2707	B39301-R2707-U310	C61157-A7-A56	F61074-V8070-Z000		

Electrostatic Sensitive Device (ESD)

#### **Maximum ratings**

Operable temperature range	$T_{A}$	-45/+85	°C	
Storage temperature range	$T_{\rm stg}$	-45/+85	°C	
DC voltage	$V_{\rm DC}$	12	V	between any terminals
Source power	$P_{\rm s}^{-1}$	0	dBm	



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### **Characteristics**

 $\begin{array}{ll} \mbox{Reference temperature:} & T_{\mbox{A}} = 25 \ ^{\circ}\mbox{C} \\ \mbox{Terminating Source impedance:} & Z_{\mbox{S}} = 50 \ \Omega \\ \mbox{Terminating Load impedance:} & Z_{\mbox{L}} = 50 \ \Omega \\ \end{array}$ 

		min.	typ.	max.	
Center frequency f	r C	303,750	303,825	303,900	MHz
(center frequency between 3 dB points)					
Minimum insertion attenuation	X <sub>min</sub>	_	8,5	10	dB
Phase at f <sub>c</sub>	р	_	150	_	° el.
Loaded quality factor	$Q_L$	4000	6700	_	
Unloaded quality factor	ך <sub>∪</sub>	6500	10000	_	
Ageing of f <sub>c</sub>		_	_	±50	ppm
Equivalent circuit elements					
Motional capacitance	$C_1$	_	0,307	_	fF
Motional inductance	-1	_	894	_	μН
Motional resistance F	₹1	_	160	_	Ω
Input / Output capacitance	$C_0$	_	2,4	_	pF
Temperature coefficient of frequency 1)	TC <sub>f</sub>	_	-0,03	_	ppm/K <sup>2</sup>
Turnover temperature	Γ <sub>0</sub>	10	_	40	°C

<sup>&</sup>lt;sup>1)</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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