## imall

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# SAW Components

Data Sheet R884





#### SAW Components R884 Resonator 310,00 MHz

**Data Sheet** 

#### Features

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

#### Terminals

Ni, gold plated



Ceramic package QCC4A

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		
R884	B39311-R 884-H210	C61157-A7-A86	F61074-V8175-Z000		

Electrostatic Sensitive Device (ESD)

#### **Maximum ratings**

Operable temperature range	T <sub>A</sub>	-40/+125	°C	
Storage temperature range	$T_{\rm sta}$	-40/+125	°C	
DC voltage	$V_{\rm DC}$	12	V	between any terminals
Source power	$P_{\rm s}^{\rm -2}$	0	dBm	
Source power	$P_{\rm s}$	0	aBm	





SAW Components	R884
Resonator	310,00 MHz
Data Sheet	
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>	309,90	310,00	310,10	MHz
Minimum insertion attenuation	$\alpha_{min}$	_	1,5	1,9	dB
Unloaded quality factor	$Q_{\rm U}$	9000	11900	_	
Ageing of <i>f</i> <sub>c</sub>				-50/+50	ppm
Equivalent circuit elements					
Motional capacitance	$C_1$		2,258	_	fF
Motional inductance	$L_1$		116,7	_	μH
Motional resistance	$R_1$	_	19	25	Ω
Parallel capacitance <sup>2)</sup>	$C_0$	—	2,7	-	pF
Temperature coefficient of frequency <sup>3)</sup>	TC <sub>f</sub>	_	-0,032	—	ppm/K <sup>2</sup>
Turnover temperature	$T_0$	25		55	°C

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

3



SAW Components	R884
Resonator	310,00 MHz

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This brochure replaces the previous edition.

**Data Sheet** 

For questions on technology, prices and delivery please contact the Sales Offices of EPCOS AG or the international Representatives.

Due to technical requirements components may contain dangerous substances. For information on the type in question please also contact one of our Sales Offices.



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