



# SAW Components

Data Sheet R 806





SAW Components

R 806

Resonator

433,42 MHz

Data Sheet

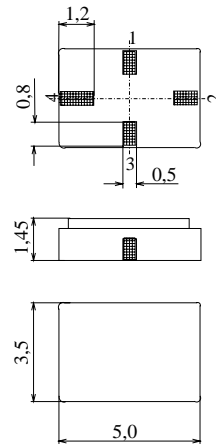
Ceramic package **QCC4A**

Features

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

Terminals

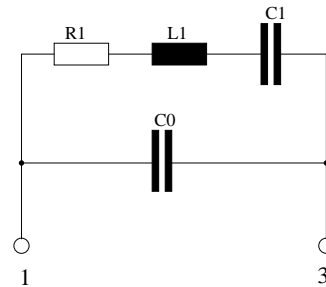
- Ni, gold plated



Dimensions in mm, approx. weight 0,1 g

Pin configuration

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



Type	Ordering code	Marking and Package according to	Packing according to
R 806	B39431-R 806-H210	C61157-A7-A86	F61074-V8120-Z000

Electrostatic Sensitive Device (ESD)

Maximum ratings

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


**SAW Components**
**R 806**
**Resonator**
**433,42 MHz**
**Data Sheet**
**Characteristics**

Reference temperature:  $T_A = 25\text{ °C}$   
 Terminating source impedance:  $Z_S = 50\ \Omega$   
 Terminating load impedance:  $Z_L = 50\ \Omega$

		<b>min.</b>	<b>typ.</b>	<b>max.</b>	
<b>Center frequency</b> <sup>1)</sup>	$f_c$	433,345	433,42	433,495	MHz
<b>Minimum insertion attenuation</b>	$\alpha_{\min}$	—	1,2	1,7	dB
Unloaded quality factor	$Q_U$	8300	13200	—	
<b>Ageing of <math>f_c</math></b>		—	—	-10/+50	ppm
<b>Equivalent circuit elements</b>					
Motional capacitance	$C_1$	—	2,01	—	fF
Motional inductance	$L_1$	—	67,08	—	$\mu\text{H}$
Motional resistance	$R_1$	—	13	20	$\Omega$
Parallel capacitance <sup>2)</sup>	$C_0$	—	2,4	—	pF
<b>Temperature coefficient of frequency</b> <sup>3)</sup>	$TC_f$	—	-0,032	—	ppm/K <sup>2</sup>
<b>Turnover temperature</b>	$T_0$	5	—	25	$^{\circ}\text{C}$

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



**SAW Components**

**R 806**

**Resonator**

**433,42 MHz**

**Data Sheet**

**Published by EPCOS AG**

**Surface Acoustic Wave Components Division, SAW CE AE**

**P.O. Box 80 17 09, 81617 Munich, GERMANY**

©.EPCOS AG 2002. Reproduction, publication and dissemination of this brochure and the information contained therein without EPCOS' prior express consent is prohibited.

Purchase orders are subject to the General Conditions for the Supply of Products and Services of the Electrical and Electronics Industry recommended by the ZVEI (German Electrical and Electronic Manufacturers' Association), unless otherwise agreed.

This brochure replaces the previous edition.

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.