



SAW Components

Data Sheet R 804

Data Sheet

An abstract, grayscale graphic featuring a stylized, three-dimensional representation of the EPCOS logo. The letters "EPCOS" are rendered in a bold, sans-serif font, appearing to be part of a larger, curved structure that resembles a globe or a stylized wave. The background is dark and textured, with light reflecting off the surfaces of the logo.



SAW Components

R 804

Resonator

868,35 MHz

Data Sheet

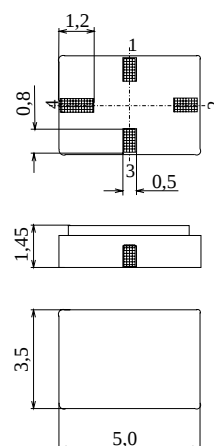
Ceramic package **QCC4A**

Features

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

Terminals

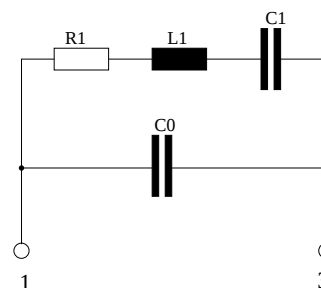
- Ni, gold plated



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 804	B39871-R 804-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 804

Resonator

868,35 MHz

Data Sheet

Characteristics

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

		min.	typ.	max.	
Center frequency ¹⁾	f_c	868,15	868,35	868,55	MHz
Minimum insertion attenuation	$\alpha_{\min}$	—	1,2	1,6	dB
Unloaded quality factor	Q_U	5100	7800	—	
Ageing of f_c		—	—	-10/+50	ppm
Equivalent circuit elements					
Motional capacitance	C_1	—	2,11	—	fF
Motional inductance	L_1	—	15,9	—	μH
Motional resistance	R_1	—	12	17	Ω
Parallel capacitance ²⁾	C_0	—	2,20	—	pF
Temperature coefficient of frequency ³⁾	TC_f	—	-0,032	—	ppm/K ²
Turnover temperature	T_0	15	—	35	°C

¹⁾ Center frequency is defined as maximum of the real part of the admittance

²⁾ If used in two port configuration (pin 1-input, pin 3-output) C_0 is reduced by approx. 0,3 pF.

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



SAW Components

R 804

Resonator

868,35 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 2004. 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.