



SAW Components

Data Sheet R 807

Data Sheet

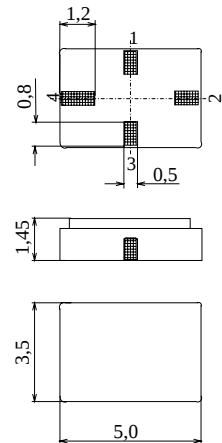
A large, stylized graphic of a globe is shown, with the word "EPCOS" overlaid in large, glowing, white letters. The globe is depicted with a grid of latitude and longitude lines, and the continents are visible. The word "EPCOS" is written in a bold, sans-serif font, with the letters appearing to be three-dimensional and glowing with a bright light. The background is dark, making the glowing letters and the globe stand out.

Ceramic package **QCC4A**
Features

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

Terminals

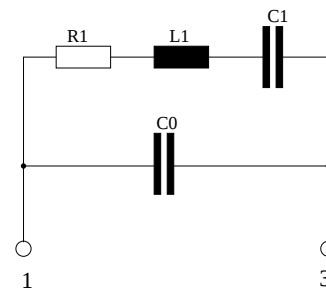
- Ni, gold plated



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
R807	B39301-R807-H210	C61157-A7-A86	F61074-V8175-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 807

Resonator

303,825 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	303,750	303,825	303,900	MHz
Minimum insertion attenuation	$\alpha_{\min}$	—	1,2	1,6	dB
Unloaded quality factor	Q_U	12500	17300	—	
Ageing of f_c		—	—	-10/+50	ppm
Equivalent circuit elements					
Motional capacitance	C_1	—	1,95	—	fF
Motional inductance	L_1	—	140,72	—	μH
Motional resistance	R_1	—	15	21	Ω
Parallel capacitance ²⁾	C_0	—	2,5	—	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 807
Resonator		303,825 MHz
Data Sheet		The SMD logo is the letters "SMD" in a bold, italicized, sans-serif font, with a horizontal line through the middle of the letters.

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Surface Acoustic Wave Components Division, SAW CE AE

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

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This brochure replaces the previous edition.

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