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With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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SAW Components

Data Sheet R770

Data Sheet

A large, stylized, 3D-rendered graphic of the EPCOS logo. The letters "EPCOS" are rendered in a white, glowing, sans-serif font, appearing to be part of a larger, curved structure that resembles a stylized globe or a series of overlapping planes. The background is dark and textured.



SAW Components

R 770

Resonator

433,81 / 434,06 MHz

Data Sheet

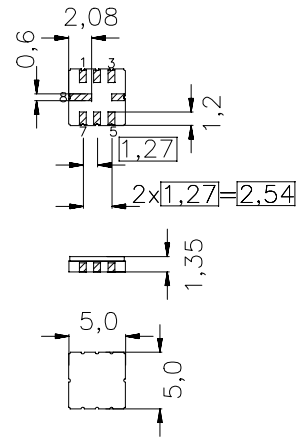
Ceramic package **QCC8C**

Features

- 1-port resonator (2 Resonators in 1 housing)
- Provides reliable, fundamental mode, quartz frequency stabilization i.e. in transmitters or local oscillators
- Protection layer: Protec

Terminals

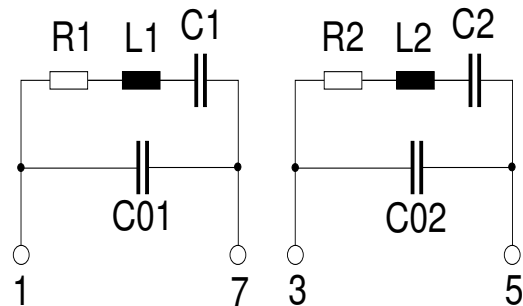
- Ni, gold plated



Dimensions in mm, approx. weight 0,1 g

Pin configuration

- | | |
|-----|---------------|
| 1 | Input Reso 1 |
| 3 | Input Reso 2 |
| 7 | Output Reso 1 |
| 5 | Output Reso 2 |
| 4,8 | Ground (case) |
| 2,6 | float |



Type	Ordering code	Marking and Package according to	Packing according to
R 770	B39431-R 770-U310	C61157-A7-A56	F61074-V8169-Z000

Electrostatic Sensitive Device (ESD)

Maximum ratings

Operable temperature range	T_A	-45/+120	°C	between any terminals
Storage temperature range	T_{stg}	-45/+120	°C	
DC voltage	V_{DC}	12	V	
Source power	P_s	0	dBm	



SAW Components

R 770

Resonator

433,81 / 434,06 MHz

Data Sheet

Characteristics Resonator 1

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 Resonator 1¹⁾	f_c	433,76	433,81	433,86	MHz
Frequency offset Resonator 2 to Resonator 1	f_{offset}	200,0	250,0	300,0	KHz
Minimum insertion attenuation	α_{min}	—	1,3	1,7	dB
Unloaded quality factor	Q_U	7500	10100	—	
Ageing of f_c		—	—	± 50	ppm
Equivalent circuit elements					
Motional capacitance	C_1	—	2,12	—	fF
Motional inductance	L_1	—	63,43	—	μH
Motional resistance	R_1	—	17	23	Ω
Parallel capacitance ²⁾	C_{01}	—	2,4	—	pF
Temperature coefficient of frequency³⁾	TC_f	—	-0,03	—	ppm/K ²
Turnover temperature	T_0	5	—	35	$^{\circ}\text{C}$

- 1) Center frequency is defined as the maximum of the real part of the admittance.
- 2) If used in two port configuration (pin 1-input, pin 7-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 770

Resonator

433,81 / 434,06 MHz

Data Sheet

Characteristics Resonator 2

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 Resonator 2¹⁾	f_c	434,01	434,06	434,11	MHz
Frequency offset Resonator 2 to Resonator 1	f_{offset}	200,0	250,0	300,0	KHz
Minimum insertion attenuation	α_{min}	—	1,3	1,7	dB
Unloaded quality factor	Q_U	7500	10100	—	
Ageing of f_c		—	—	± 50	ppm
Equivalent circuit elements					
Motional capacitance	C_2	—	2,14	—	fF
Motional inductance	L_2	—	62,86	—	μH
Motional resistance	R_2	—	17	23	Ω
Parallel capacitance ²⁾	C_{02}	—	2,4	—	pF
Temperature coefficient of frequency³⁾	TC_f	—	-0,03	—	ppm/K ²
Turnover temperature	T_0	5	—	35	$^{\circ}\text{C}$

- 1) Center frequency is defined as the maximum of the real part of the admittance.
- 2) If used in two port configuration (pin 3-input, pin 5-output) C_0 is reduced by approx. 0,3 pF.
- 3) Temperature dependence of f_c : $f_c(T_A) = f_c(T_0)(1 + TC_f(T_A - T_0)^2)$



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This brochure replaces the previous edition.

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