



SAW Components

Data Sheet R 2710

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

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Resonator

311,063 MHz

Data Sheet

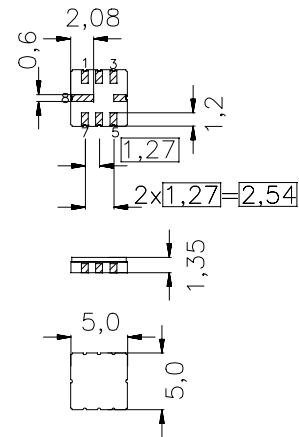
SMD Ceramic package **QCC8C**

Features

- 2-port resonator
- nominal 180°-phase at resonance
- Provides reliable, fundamental mode, quartz frequency stabilization i.e. in transmitters or local oscillators

Terminals

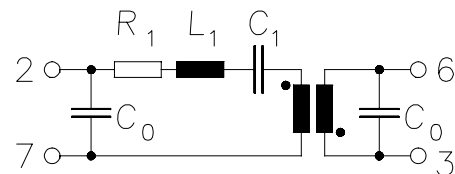
- Ni, gold plated



Dimensions in mm, approx. weight 0,1 g

Pin configuration

2	Input / Output
6	Output / Input
7	Ground (Input / Output)
3	Ground (Output / Input)
4,8	Ground (case)



Type	Ordering code	Marking and Package according to	Packing according to
R 2710	B39311-R2710-U310	C61157-A7-A56	F61074-V8070-Z000

Electrostatic Sensitive Device (ESD)

Maximum ratings

Operable temperature range	T_A	-45/+85	°C	between any terminals
Storage temperature range	T_{stg}	-45/+85	°C	
DC voltage	V_{DC}	12	V	
Source power	P_S	0	dBm	



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Characteristics

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

		min.	typ.	max.	
Center frequency (center frequency between 3 dB points)	f_c	310,988	311,063	311,138	MHz
Minimum insertion attenuation	$\alpha_{\min}$	—	8,7	10,7	dB
Phase at f_c	φ	—	158	—	° el.
Loaded quality factor	Q_L	4200	7000	—	
Unloaded quality factor	Q_U	6000	10800	—	
Ageing of f_c		—	—	±50	ppm
Equivalent circuit elements					
Motional capacitance	C_1	—	0,284	—	fF
Motional inductance	L_1	—	922	—	μH
Motional resistance	R_1	—	160	—	Ω
Input / Output capacitance	C_0	—	1,8	—	pF
Temperature coefficient of frequency ¹⁾	TC_f	—	−0,03	—	ppm/K ²
Turnover temperature	T_0	10	—	40	°C

¹⁾ 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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Surface Acoustic Wave Components Division, SAW CE AE PD

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