



SAW Components

Data Sheet R 2710

Data Sheet

A large, stylized, 3D-rendered "EPCOS" logo in white, tilted diagonally. The background is a dark, grayscale image of a globe with a grid of latitude and longitude lines, creating a sense of global reach and technology.



SAW Components

R 2710

Resonator

311,063 MHz

Data Sheet

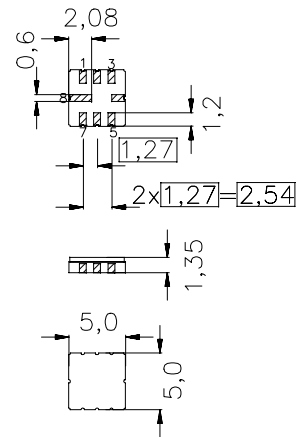
SMD Ceramic package **QCC8C**

Features

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

Terminals

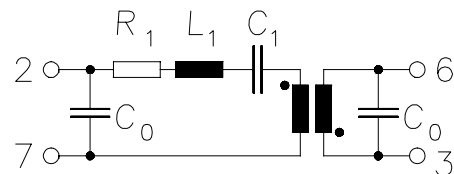
- Ni, gold plated



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	α_{\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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