



SAW Components

Data Sheet R 715

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 715

Resonator

433,32 MHz

Data Sheet

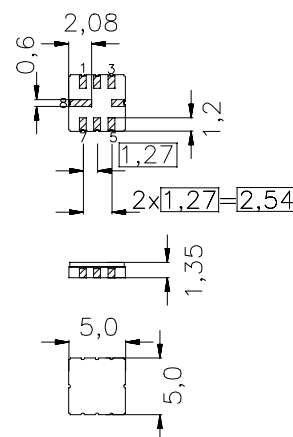
SMD Ceramic package **QCC8C**

Features

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

Terminals

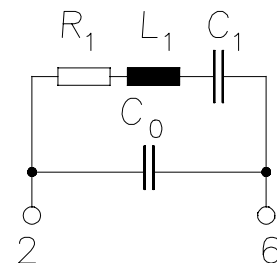
- Ni, gold plated



Dimensions in mm, approx. weight 0,1 g

Pin configuration

2	Input
6	Output, grounded in 1-port conf.
4,8	Ground (case)
1,3	float
5,7	float / ground



Type	Ordering code	Marking and Package according to	Packing according to
R 715	B39431-R 715-U310	C61157-A7-A56	F61074-V8023-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: $Z_S = 50\ \Omega$
 Terminating Load impedance: $Z_L = 50\ \Omega$

		min.	typ.	max.	
Center frequency ¹⁾	f_c	433,245	433,32	433,395	MHz
Minimum insertion attenuation	α_{\min}	—	1,4	1,9	dB
Unloaded quality factor	Q_U	7000	13000	—	
Ageing of f_c		—	—	± 50	ppm
Equivalent circuit elements					
Motional capacitance	C_1	—	1,81	—	fF
Motional inductance	L_1	—	74,53	—	μH
Motional resistance	R_1	—	16	30	Ω
Parallel Capacitance ²⁾	C_0	—	3,3	—	pF
Temperature coefficient of frequency ³⁾	TC_f	—	- 0,032	—	ppm/K ²
Turnover temperature	T_0	0	—	30	°C

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

²⁾ If used in two port configuration (pin 2-input, pin 6-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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