EPCOS

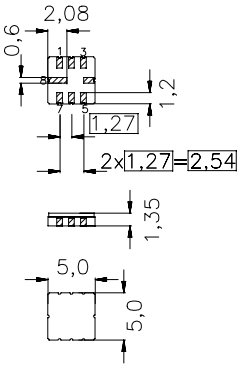
SAW Components

Data Sheet R 715

SMD Ceramic package **QCC8C**

Features

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



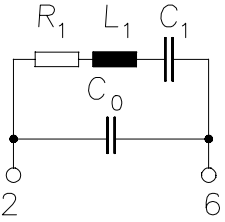
Dimensions in mm, approx. weight 0,1 g

Terminals

- Ni, gold plated

Pin configuration

2	Input
6	Ground
4,8	Ground (case)



Type	Ordering code	Marking and Package according to	Packing according to
R 715	B39431-R 715-U310	C61157-A7-A56	F61074-V8023-Z000

Electrostatic **S**ensitive **D**evice (**ESD**)

Maximum ratings

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

Data Sheet

Characteristics

Reference temperature: T_A = 25 °C
Terminating Source impedance: Z_S = 50 Ω
Terminating Load impedance: Z_L = 50 Ω

		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	C_0	—	3,3	—	pF
Temperature coefficient of frequency [2]	TC_f	—	– 0,032	—	ppm/K²
Turnover temperature	T_0	0	—	30	°C

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

[2] 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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