EPCOS

SAW Components

Data Sheet R 2701

Data Sheet

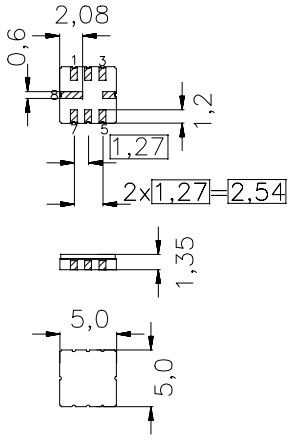
SMD Ceramic package **QCC8C**

Features

- 2-port resonator
- nominal 180˚-phase at resonance
- Provides reliable, fundamental mode, quartz frequency stabilization i.e. in transmitters or local oscillators
- AEC-Q200 qualified component family

Terminals

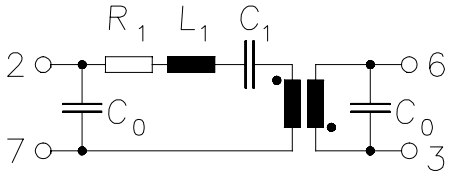
- Ni, gold plated



Dimensions in mm, approx. weight 0,1 g

Pin configuration

2	Input / Ouptput
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
R2701	B39431-R2701-U310	C61157-A7-A56	F61074-V8070-Z000

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

Maximum ratings

Operable temperature range	T_A	–45/+125	˚C	
Storage temperature range	T_{stg}	–45/+125	˚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 (center frequency between 3 dB points)	f_c	433,845	433,920	433,995	MHz
Minimum insertion attenuation	α_{min}	—	9,2	10,5	dB
Phase at f_c	φ	—	160	—	˚ el.
Loaded quality factor	Q_L	5000	7800	—	
Unloaded quality factor	Q_U	8000	11200	—	
Ageing of f_c		—	—	±50	ppm
Equivalent circuit elements					
Motional capacitance	C_1	—	0,141	—	fF
Motional inductance	L_1	—	954	—	µH
Motional resistance	R_1	—	230	—	Ω
Input / Output capacitance	C_0	—	2,3	—	pF
Temperature coefficient of frequency [1)]	TC_f	—	–0,03	—	ppm/K^2
Turnover temperature	T_0	—	40	—	˚C

[1)] Temperature dependence of f_c: $f_c(T_A) = f_c(T_0)(1 + TC_f(T_A - T_0)^2)$

Published by EPCOS AG
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The information contained in this brochure describes the type of component and shall not be considered as guaranteed characteristics. Purchase orders are subject to the General Conditions for the Supply of Products and Services of the Electrical and Electronics Industry recommended by the ZVEI (German Electrical and Electronic Manufacturers' Association), unless otherwise agreed.

This brochure replaces the previous edition.

For questions on technology, prices and delivery please contact the Sales Offices of EPCOS AG or the international Representatives.

Due to technical requirements components may contain dangerous substances. For information on the type in question please also contact one of our Sales Offices.