EPCOS

SAW Components

Data Sheet R 2704

Data Sheet

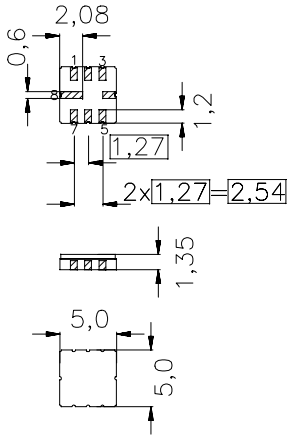
SMD Ceramic package **QCC8C**

Features

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

Terminals

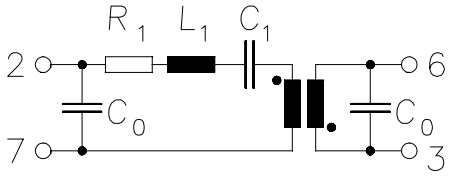
- Ni, gold plated



Dimensions in mm, approx. weight 0,1 g

Pin configuration

2	Input / 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
R2704	B39321-R2704-U310	C61157-A7-A56	F61074-V8070-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 (center frequency between 3 dB points)	f_c	314,900	315,000	315,100	MHz
Minimum insertion attenuation	α_{min}	—	9,4	11,0	dB
Phase at f_c	φ	—	160	—	˚ el.
Loaded quality factor	Q_L	5800	9000	—	
Unloaded quality factor	Q_U	9200	13600	—	
Ageing of f_c		—	—	±50	ppm
Equivalent circuit elements					
Motional capacitance	C_1	—	0,196	—	fF
Motional inductance	L_1	—	1,302	—	µH
Motional resistance	R_1	—	195	—	Ω
Input / Output capacitance	C_0	—	1,3	—	pF
Temperature coefficient of frequency [1]	TC_f	—	–0,03	—	ppm/K²
Turnover temperature	T_0	—	25	—	˚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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