



SAW Components

Data Sheet R2704

Data Sheet

A large, stylized, 3D-rendered graphic of the EPCOS logo. The letters "EPCOS" are rendered in a glowing, white, sans-serif font, appearing to be part of a larger, curved structure that resembles a globe or a complex circuit board. The background is dark and textured, with a faint map of the world visible.



SAW Components

R 2704

Resonator

315,00 MHz

Data Sheet

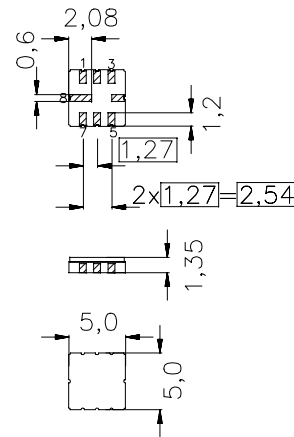
SMD Ceramic package QCC8C

Features

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

Terminals

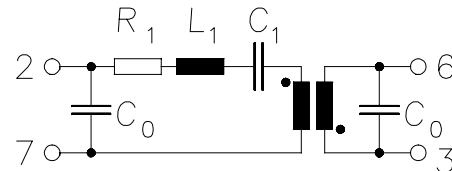
- Ni, gold plated



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
R2704	B39321-R2704-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: $Z_S = 50\ \Omega$
 Terminating Load impedance: $Z_L = 50\ \Omega$

		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/K ²
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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Surface Acoustic Wave Components Division, SAW CE AE PD

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