



SAW Components

Data Sheet R 718

Data Sheet

An abstract, grayscale graphic featuring a large, stylized, and slightly blurred "EPCOS" logo. The logo is set against a background of curved, overlapping bands and a faint world map, creating a sense of global connectivity and technology.



SAW Components

R 718

Resonator

303,825 MHz

Data Sheet

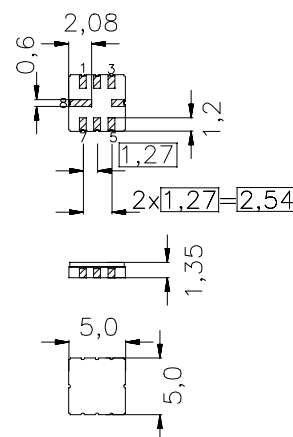
Ceramic package **QCC8C**

Features

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

Terminals

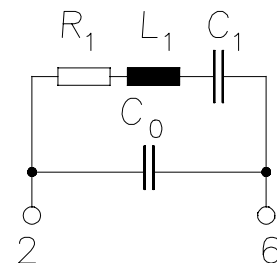
- Ni, gold plated



Dimensions in mm, approx. weight 0,1 g

Pin configuration

| | |
|-----|---------------|
| 2 | Input |
| 6 | Ground |
| 4,8 | Ground (case) |



| Type | Ordering code | Marking and Package according to | Packing according to |
|-------|-------------------|----------------------------------|----------------------|
| R 718 | B39301-R 718-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 ¹⁾ | f_c | 303,740 | 303,825 | 303,910 | MHz |
| Minimum insertion attenuation | α_{\min} | — | 1,7 | 2,2 | dB |
| Unloaded quality factor | Q_U | 9400 | 13500 | — | |
| Ageing of f_c | | — | — | ± 50 | ppm |
| Equivalent circuit elements | | | | | |
| Motional capacitance | C_1 | — | 1,84 | — | fF |
| Motional inductance | L_1 | — | 149,13 | — | μH |
| Motional resistance | R_1 | — | 21 | 30 | Ω |
| Parallel capacitance | C_0 | — | 3,1 | — | pF |
| Temperature coefficient of frequency ²⁾ | TC_f | — | -0,032 | — | ppm/K ² |
| Turnover temperature | T_0 | 25 | — | 55 | °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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