



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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SAW Components

Data Sheet R850

Data Sheet

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



SAW Components

R 850

Resonator

433,94 MHz

Data Sheet

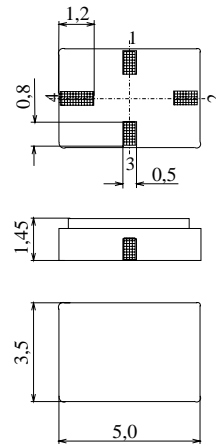
Ceramic package **QCC4A**

Features

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

Terminals

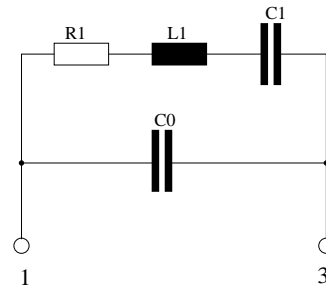
- Ni, gold plated



Dimensions in mm, approx. weight 0,1 g

Pin configuration

- 1 Input
- 3 Output, grounded in 1-port conf.
- 2,4 Ground (case)



| Type | Ordering code | Marking and Package according to | Packing according to |
|-------|-------------------|----------------------------------|----------------------|
| R 850 | B39431-R 850-H210 | C61157-A7-A86 | F61074-V8120-Z000 |

Electrostatic Sensitive Device (ESD)

Maximum ratings

| | | | | |
|----------------------------|-----------|----------|-----|-----------------------|
| Operable temperature range | T_A | -40/+125 | °C | between any terminals |
| Storage temperature range | T_{stg} | -40/+125 | °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 | 433,89 | 433,94 | 433,99 | MHz |
| Minimum insertion attenuation | α_{\min} | — | 1,2 | 1,5 | dB |
| Unloaded quality factor | Q_U | 8000 | 13800 | — | |
| Ageing of f_c | | — | — | -10/+50 | ppm |
| Equivalent circuit elements | | | | | |
| Motional capacitance | C_1 | — | 2,066 | — | fF |
| Motional inductance | L_1 | — | 65,11 | — | μH |
| Motional resistance | R_1 | — | 13 | 18 | Ω |
| Parallel capacitance ²⁾ | C_0 | — | 2,7 | — | pF |
| Temperature coefficient of frequency ³⁾ | TC_f | — | -0,032 | — | ppm/K ² |
| Turnover temperature | T_0 | 15 | 25 | 35 | $^{\circ}\text{C}$ |

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

²⁾ If used in two port configuration (pin 1-input, pin 3-output) C_0 is reduced by approx. 0,3 pF.

³⁾ 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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