



SAW Components

Data Sheet R900

Data Sheet

An abstract, grayscale graphic featuring a stylized, three-dimensional representation of the EPCOS logo. The logo is rendered in a glowing, metallic style, with the word "EPCOS" in large, bold, sans-serif letters. The background is dark and textured, with a faint, glowing globe or sphere visible behind the logo.



SAW Components	R900
Resonator	433,92 MHz

Data Sheet



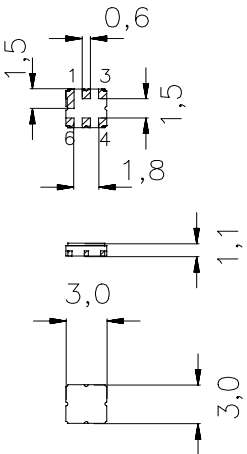
Ceramic package DCC6C

Features

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

Terminals

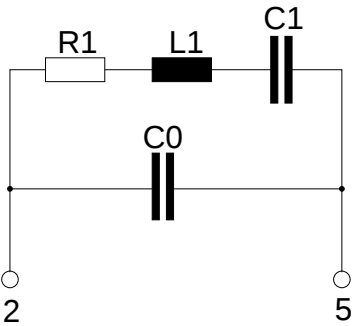
- Ni, gold plated



Dimensions in mm, approx. weight 0,037 g

Pin configuration

- 2 Input
- 5 Output, grounded in 1-port conf.
- 1, 3, 4, 6 Ground (case)



Type	Ordering code	Marking and Package according to	Packing according to
R900	B39431-R 900-U410	C61157-A7-A67	F61074-V8168-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	433,845	433,920	433,995	MHz
Minimum insertion attenuation	$\alpha_{\min}$	—	1,4	1,9	dB
Unloaded quality factor	Q_U	8300	12000	—	
Ageing of f_c		—	—	-50/+50	ppm
Equivalent circuit elements					
Motional capacitance	C_1	—	1,685	—	fF
Motional inductance	L_1	—	79,82	—	μH
Motional resistance	R_1	—	18	26	Ω
Parallel capacitance ²⁾	C_0	—	2,3	—	pF
Temperature coefficient of frequency ³⁾	TC_f	—	-0,032	—	ppm/K ²
Turnover temperature	T_0	20	—	50	°C

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

²⁾ If used in two port configuration (pin 2-input, pin 5-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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