



SAW Components

Data Sheet R900





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R900

Resonator

433,92 MHz

Data Sheet



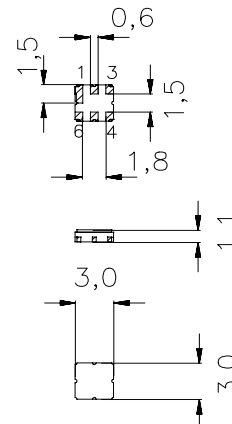
Ceramic package **DCC6C**

Features

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

Terminals

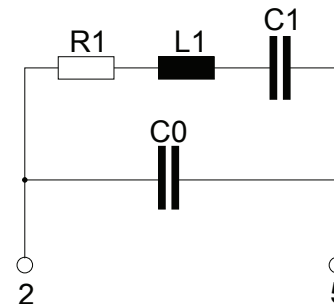
- Ni, gold plated



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	α_{\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	$^{\circ}\text{C}$

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

²⁾ If used in two port configuration (pin 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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Data Sheet	The SMD logo is a stylized, bold, sans-serif font where the letters "S", "M", and "D" are interconnected. The "S" and "M" are joined together, and the "D" is positioned to the right, with its vertical stroke partially overlapping the "M".

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