

SAW Components

Data Sheet R900





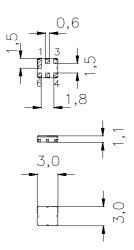
SAW Components		R900
Resonator		433,92 MHz
Data Sheet	SMD	
		Ceramic package DCC6C

Features

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

Terminals

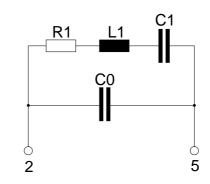
Ni, gold plated



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)



Туре	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	
Storage temperature range	$T_{\rm stg}$	-40/+125	°C	
DC voltage	V _{DC}	12	V	between any terminals
Source power	Ps	0	dBm	

2



SAW Components Resonator		R900 433,92 MHz
Data Sheet	SMD	
Characteristics		
Reference temperature: Terminating source impedance: Terminating load impedance:	$T_{A} = 25 °C$ $Z_{S} = 50 \Omega$ $Z_{L} = 50 \Omega$	

		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 <i>f</i> _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 : $f_c(T_A) = f_c(T_0)(1 + TC_f(T_A - T_0)^2)$

3



SAW Components		R900
Resonator		433,92 MHz
Data Sheet	SMD	

Published by EPCOS AG Surface Acoustic Wave Components Division, SAW CE AE P.O. Box 80 17 09, 81617 Munich, GERMANY

©.EPCOS AG 2004. Reproduction, publication and dissemination of this brochure and the information contained therein without EPCOS' prior express consent is prohibited.

Purchase orders are subject to the General Conditions for the Supply of Products and Services of the Electrical and Electronics Industry recommended by the ZVEI (German Electrical and Electronic Manufacturers' Association), unless otherwise agreed.

This brochure replaces the previous edition.

For questions on technology, prices and delivery please contact the Sales Offices of EPCOS AG or the international Representatives.

Due to technical requirements components may contain dangerous substances. For information on the type in question please also contact one of our Sales Offices.

