

SAW Components

Data Sheet R901





SAW Components R901
Resonator 315,00 MHz

Data Sheet

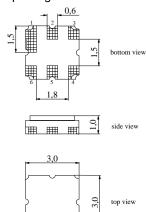
Features

- 1-port resonator
- Provides reliable, fundamental mode, quartz frequency stabilization i.e. in transmitters or local oscillators
- Hermetically sealed ceramic package
- Protection layer: Elpas
- AEC-Q200 qualified components family
- Compliant to EU RoHs Directive (2002/95/EC)
- Lead free soldering compatible with J STD20C

Terminals

■ Ni, gold plated

Ceramic package



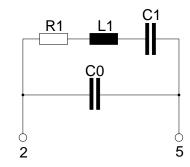
Dimensions in mm, approx. weight 0,037 g

Pin configuration

2 Input

5 Output, grounded in 1-port conf.

1,3,4,6 Ground (case)



Туре	Ordering code	Marking and Package	Packing		
		according to	according to		
R901	B39321-R 901-H110	C61157-A7-A143	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	$V_{\rm DC}$	12	V	between any terminals
Source power	$P_{\rm s}$	0	dBm	



SAW Components R901
Resonator 315,00 MHz

Data Sheet

Characteristics

 $\begin{array}{ll} \mbox{Reference temperature:} & T_{\mbox{A}} = 25 \ ^{\circ}\mbox{C} \\ \mbox{Terminating source impedance:} & Z_{\mbox{S}} = 50 \ \Omega \\ \mbox{Terminating load impedance:} & Z_{\mbox{L}} = 50 \ \Omega \\ \end{array}$

		min.	typ.	max.	
Center frequency 1)	f _c	314,925	315,000	315,075	MHz
Minimum insertion attenuation	α_{min}	_	1,5	1,9	dB
Unloaded quality factor	Q_{U}	7600	11000	_	
Ageing of f _c		_	_	-50/+50	ppm
Equivalent circuit elements					
Motional capacitance	C_1		2,268	_	fF
Motional inductance	L_1	_	112,5	_	μΗ
Motional resistance	R_1	_	20	28	Ω
Parallel capacitance ²⁾	C_0	_	3,30	_	pF
Temperature coefficient of frequency 3)	TC_{f}	_	-0,032	_	ppm/K ²
Turnover temperature	T_0	15	_	35	°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 : $f_c(T_A) = f_c(T_0)(1 + TC_f(T_A - T_0)^2)$



SAW Components R901
Resonator 315,00 MHz

Data Sheet

Published by EPCOS AG Surface Acoustic Wave Components Division, SAW COM AE PD P.O. Box 80 17 09, D-81617 München

© EPCOS AG 2005. All Rights Reserved. Reproduction, publication and dissemination of this brochure and the information contained therein without EPCOS' prior express consent is prohibited.

The information contained in this brochure describes the type of component and shall not be considered as guaranteed characteristics. 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.