

SAW Components

SAW resonator

Short range devices

Series/type: Ordering code: R 981 B39321R 981U410

Date: Version: March 23, 2009 2.1

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SAW Components		R 981
SAW resonator		315.00 MHz
Data sheet	<u>smd</u>	

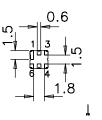
Application

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



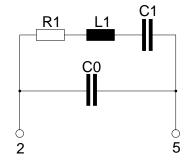
Features

- Package size 3.0 x 3.0 x 1.1 mm³
- Package code DCC6C
- RoHS compatible
- Approximate weight 0.037 g
- Package for Surface Mount Technology (SMT)
- Ni, gold-plated terminals
- Lead free soldering compatible with J STD20C
- Passivation layer Elpas
- AEC-Q200 qualified component family
- Electrostactic Sensitive Device (ESD)



Pin configuration

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



Please read *cautions and warnings and important notes* at the end of this document.

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SAW Components					R 981
SAW resonator				31	5.00 MHz
Data sheet					
Characteristics					
Reference temperature: Terminating source impedance: Terminating load impedance:	$\begin{array}{l} T_{A} &= 25 \ ^{\circ}C \\ Z_{S} &= 50 \ \Omega \\ Z_{L} &= 50 \ \Omega \end{array}$				
		min.	typ.	max.	
0	4	214.00	215.00	215 10	

f _C	314.90	315.00	315.10	MHz
α_{min}	_	1.4	1.8	dB
QU	7600	11000	—	
	—	—	-50/+50	ppm
C ₁	_	2.334	—	fF
L ₁	—	109.4	—	μH
R ₁	—	19	27	Ω
C ₀	—	3.3	—	pF
) TC _f	—	-0.032	—	ppm/K ²
T ₀	20		50	°C
	$\begin{array}{c} C_{1} \\ C_{1} \\ L_{1} \\ R_{1} \\ C_{0} \end{array}$	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$

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) C₀ is reduced by approx. 0.3 pF. ³⁾ Temperature dependence of f_C : $f_C(T_A) = f_C(T_0) (1 + TC_f (T_A - T_0)^2)$

Maximum ratings

Operable temperature range	Т	-40/+125	°C
Storage temperature range	T _{stg}	-40/+125	°C
DC voltage	V _{DC}	12	V
Source power	P _S	0	dBm

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Data sheet	SMD	

References

Туре	R 981
Ordering code	B39321R 981U410
Marking and package	C61157-A7-A67
Packaging	F61074-V8168-Z000
Date codes	L_1126
Soldering profile	S_6001
RoHS compatible	defined as compatible with the following documents: "DIRECTIVE 2002/95/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 27 January 2003 on the restriction of the use of certain hazardous substances in electrical and electronic equipment. 2005/618/EC from April 18th, 2005, amending Directive 2002/95/EC of the European Parliament and of the Council for the purposes of establishing the maxi- mum concentration values for certain hazardous substances in electrical and electronic equipment."

For further information please contact your local EPCOS sales office or visit our webpage at www.epcos.com .

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

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