

SAW Components

SAW resonator

Short range devices

Series/type: Ordering code:

R 980 B39431R 980U410

Date: Version: April 28, 2008 2.0

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SAW Components		R 980
SAW resonator		433.92 MHz
Data sheet	SMD	

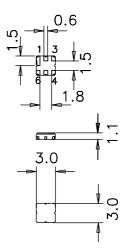
Application

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



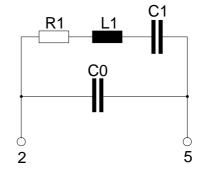
Features

- 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 G
- Ground (case)



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

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SAW Components					R 980
SAW resonator				43	3.92 MHz
Data sheet					
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	433.820	433.920	434.020	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

 R_1 Parallel capacitance²⁾ C_0 pF 2.3 ____ Temperature coefficient of frequency³⁾ TC_f -0.032 ppm/K² ____ ____ °C 20 50 **Turnover temperature** T_0

18

26

Ω

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) 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

Motional resistance

Operable temperature range	Т	-45/+125	°C
Storage temperature range	T _{stg}	-45/+125	°C
DC voltage	V _{DC}	12	V
Source power	Ps	0	dBm

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Data sheet

SMD

References

Туре	R 980
Ordering code	B39431R 980U410
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."

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Surface Acoustic Wave Components Division P.O. Box 80 17 09, 81617 Munich, GERMANY

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