

SAW Components

SAW resonator

Short range devices

Series/type: R2906

Ordering code: B39921R2906H110

Date: January 27, 2010

Version: 2.5

EPCOS AG is a TDK Group Company.

[©] EPCOS AG 2015. Reproduction, publication and dissemination of this publication, enclosures hereto and the information contained therein without EPCOS' prior express consent is prohibited.



SAW Components R2906

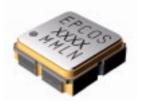
SAW resonator 915.00 MHz

Data sheet



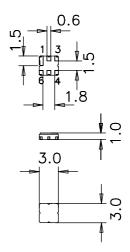
Application

- 2-port resonator
- nominal 180°- phase at resonance
- Provides reliable, fundamental mode, quartz frequency stabilization i.e. in transmitters or local oscillators



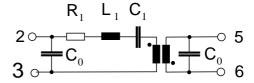
Features

- Package size 3.0 x 3.0 x 1.0 mm³
- Package code DCC6E
- 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
- **3** Input (Ground)
- **5** Output
- Output (Ground) **6**
- **1**,4 Ground (case)





SAW Components R2906

SAW resonator 915.00 MHz

Data sheet = MD

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	f _C	914.75	915.00	915.25	MHz
Minimum insertion attenuation	α_{min}	_	7.5	8.5	dB
Phase at f _c	φ	_	124	_	° el.
Loaded quality factor	Q_L	2500	2900	_	
Unloaded quality factor	Q_U	4200	4700	_	
Ageing of f _C		_	_	-50/+50	ppm
Equivalent circuit elements					
Motional capacitance	C_1	_	0.311		fF
Motional inductance	L ₁	_	97.15	_	μΗ
Motional resistance	R_1	_	109	_	Ω
Parallel capacitance	C_0	_	1.8	_	pF
Temperature coefficient of frequency ¹⁾	TC _f	_	-0.032	_	ppm/K ²
Turnover temperature	T_0	30	_	60	°C

¹⁾ 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	T	-45/+125	°C
Storage temperature range	T _{stg}	-45/+125	°C
DC voltage	V_{DC}	12	V
Source power	P_S	0	dBm



SAW Components	R2906
SAW resonator	915.00 MHz

Data sheet



References

Туре	R2906
Ordering code	B39921R2906H110
Marking and package	C61157-A7-A143
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 maximum 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 .

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

© EPCOS AG 2010. 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.



Important notes

The following applies to all products named in this publication:

- Some parts of this publication contain statements about the suitability of our products for certain areas of application. These statements are based on our knowledge of typical requirements that are often placed on our products in the areas of application concerned. We nevertheless expressly point out that such statements cannot be regarded as binding statements about the suitability of our products for a particular customer application. As a rule, EPCOS is either unfamiliar with individual customer applications or less familiar with them than the customers themselves. For these reasons, it is always ultimately incumbent on the customer to check and decide whether an EPCOS product with the properties described in the product specification is suitable for use in a particular customer application.
- 2. We also point out that in individual cases, a malfunction of electronic components or failure before the end of their usual service life cannot be completely ruled out in the current state of the art, even if they are operated as specified. In customer applications requiring a very high level of operational safety and especially in customer applications in which the malfunction or failure of an electronic component could endanger human life or health (e.g. in accident prevention or life-saving systems), it must therefore be ensured by means of suitable design of the customer application or other action taken by the customer (e.g. installation of protective circuitry or redundancy) that no injury or damage is sustained by third parties in the event of malfunction or failure of an electronic component.
- 3. The warnings, cautions and product-specific notes must be observed.
- 4. In order to satisfy certain technical requirements, some of the products described in this publication may contain substances subject to restrictions in certain jurisdictions (e.g. because they are classed as hazardous). Useful information on this will be found in our Material Data Sheets on the Internet (www.epcos.com/material). Should you have any more detailed questions, please contact our sales offices.
- 5. We constantly strive to improve our products. Consequently, the products described in this publication may change from time to time. The same is true of the corresponding product specifications. Please check therefore to what extent product descriptions and specifications contained in this publication are still applicable before or when you place an order. We also reserve the right to discontinue production and delivery of products. Consequently, we cannot guarantee that all products named in this publication will always be available. The aforementioned does not apply in the case of individual agreements deviating from the foregoing for customer-specific products.
- Unless otherwise agreed in individual contracts, all orders are subject to the current version of the "General Terms of Delivery for Products and Services in the Electrical Industry" published by the German Electrical and Electronics Industry Association (ZVEI).
- 7. The trade names EPCOS, BAOKE, Alu-X, CeraDiode, CSMP, CSSP, CTVS, DeltaCap, DigiSiMic, DSSP, MiniBlue, MiniCell, MKK, MLSC, MotorCap, PCC, PhaseCap, PhaseCube, PhaseMod, PhiCap, SIFERRIT, SIFI, SIKOREL, SilverCap, SIMDAD, SiMic, SIMID, SineFormer, SIOV, SIP5D, SIP5K, ThermoFuse, WindCap are trademarks registered or pending in Europe and in other countries. Further information will be found on the Internet at www.epcos.com/trademarks.

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for Resonators category:

Click to view products by RF360 manufacturer:

Other Similar products are found below:

146-32.768-12.5-20-20/A 1C209830BC0C 1C210000BB0C 2520-16.00-9-10-10/A 2520-26.00-12-10-10/A 2520-26.00-9-10-10/A 3225-16.00-12-10-10/A 3225-16.00-12-10-10/A 3225-16.00-12-10-10/A 3225-16.00-12-10-10/A 3225-16.00-12-10-10/A 3225-25.00-10-10/A 3225-25.00-10-10/A 3225-25.00-10-10/A 3225-25.00-10-10/A 3225-25.00-10-10/A 3225-25.00-10-10/A 3225-26.00-12-10-10/A 3225-27.00-20-10-10/A 3225-32.00-12-10-10/A 3225-8.00-10-10-10/A 3225-8.00-20-10-10/A 3225-8.00-8-10-10/A 416626X 416627H 436236G 49MD-13.52127-7-10-10/B 49MD-38.000-20-10-10/B 49MD-4.433618-30-10-10/B 49MD-4.825-9-10-10/B 49MD-4.9152-20-10-10/B 49MD-6.000-27-10-10/B 49MD-6.063-12-10-10/B 49MD-8.192-20-10-10/B 49S-12.288-20-10-10/B 49S-13.52127-10-10-10/B 49S-13.52127-7-10-10/B 49S-24.576-20-10-10/B 49S-4.000-8-10-10/B 49S-4.433618-30-10-10/B 49S-4.9152-20-10-10/B 49S-4.9152-30-10-10/B 49S-7.680-18-10-10/B 49S-8.00-20-10-20/A 49S-8.192-20-10-10/B 49S-9.81563-20-10-10/B 49S-9.81563-20-10-10/B 49SAT13560161050JY 49SAT26000201040JY 49SS-13.56-20-10-10/B 49SS-16.00-20-10-10/B