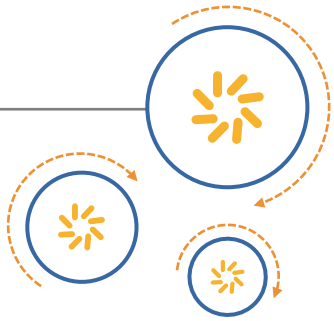
RF360 Europe GmbH

A Qualcomm – TDK Joint Venture



SAW Components

SAW resonator

Short range devices

Series/type:	R2906
Ordering code:	B39921R2906H110
Date:	January 27, 2010
Version:	2.5

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RF360 Europe GmbH, Anzinger Str. 13, München, Germany

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Series/type:	**R2906**
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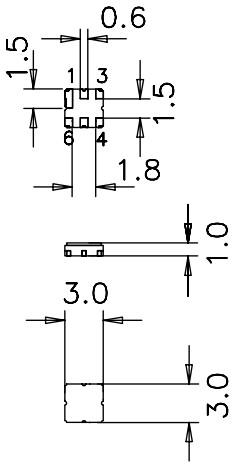
Data sheet SMD

Application

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

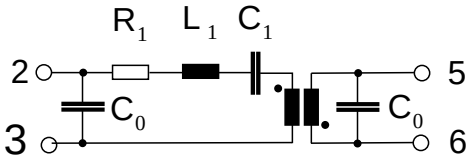
Features

- Package size 3.0 x 3.0 x 1.0 mm³
- Package code DCC6E
- RoHS compatible
- Approximate weight 0.037 g
- Package for **S**urface **M**ount **T**echnology (**SMT**)
- Ni, gold-plated terminals
- Lead free soldering compatible with J - STD20C
- Passivation layer Elpas
- AEC-Q200 qualified component family
- **E**lectrostactic **S**ensitive **D**evice (**ESD**)



Pin configuration

■	2	Input
■	3	Input (Ground)
■	5	Output
■	6	Output (Ground)
■	1,4	Ground (case)



Data sheet SMD

Characteristics

Reference temperature: T_A = 25 °C
Terminating source impedance: Z_S = 50 Ω
Terminating load impedance: Z_L = 50 Ω

		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	—	µH
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	

References

Type	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 .

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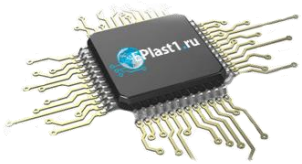

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