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With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

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## **SAW Components**

### **SAW resonator**

Short range devices

<b>Series/type:</b>	<b>R2706</b>
<b>Ordering code:</b>	<b>B39921R2706U310</b>
<b>Date:</b>	<b>May 22, 2009</b>
<b>Version:</b>	<b>2.0</b>

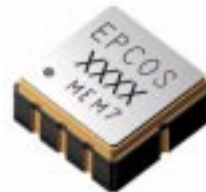


Data sheet



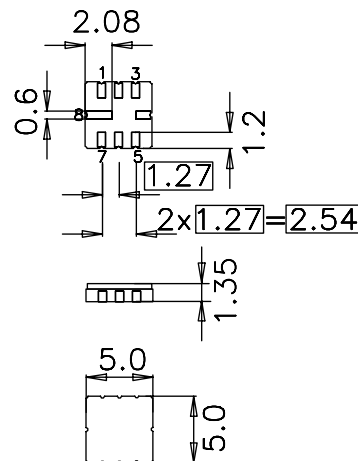
Application

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



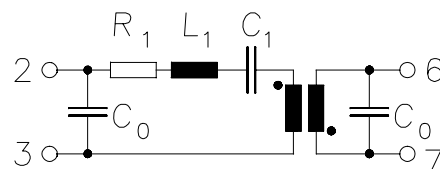
Features

- Package size 5.0 x 5.0 x 1.35 mm<sup>3</sup>
- Package code QCC8C
- RoHS compatible
- Approximate weight 0.1 g
- Package for Surface Mount Technology (SMT)
- Ni, gold-plated terminals
- Lead free soldering compatible with J - STD20C
- Protection layer Protec
- AEC-Q200 qualified component family
- Electrostatic Sensitive Device (ESD)



Pin configuration

- |     |                         |
|-----|-------------------------|
| 2   | Input / Output          |
| 6   | Output / Input          |
| 3   | Ground (Input / Output) |
| 7   | Ground (Output / Input) |
| 4,8 | Ground (case)           |
| 1,5 | Ground                  |





SAW Components

R2706

SAW resonator

915.00 MHz

Data sheet



**Characteristics**

Reference temperature:  $T_A = 25\text{ }^\circ\text{C}$   
 Terminating source impedance:  $Z_S = 50\ \Omega$   
 Terminating load impedance:  $Z_L = 50\ \Omega$

		min.	typ.	max.	
<b>Center frequency</b> (center frequency between 3 dB points)	$f_C$	914.65	915.00	915.35	MHz
<b>Minimum insertion attenuation</b>	$\alpha_{\min}$	—	7.0	9.0	dB
Phase at $f_C$	$\varphi$	—	130	—	$^\circ$ el.
Loaded quality factor	$Q_L$	3500	4300	—	
Unloaded quality factor	$Q_U$	6000	7600	—	
<b>Ageing of <math>f_C</math></b>		—	—	±50	ppm
<b>Equivalent circuit elements</b>					
Motional capacitance	$C_1$	—	0.225	—	fF
Motional inductance	$L_1$	—	134.5	—	$\mu\text{H}$
Motional resistance	$R_1$	—	100	—	$\Omega$
Input / Output capacitance	$C_0$	—	1.9	—	pF
<b>Temperature coefficient of frequency<sup>1)</sup></b>	$TC_f$	—	-0.03	—	ppm/ $\text{K}^2$
<b>Turnover temperature</b>	$T_0$	0	—	30	$^\circ\text{C}$

<sup>1)</sup> 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	$^\circ\text{C}$	between any terminals
Storage temperature range	$T_{\text{stg}}$	-45/+125	$^\circ\text{C}$	
DC voltage	$V_{\text{DC}}$	0	V	
Source power	$P_S$	0	dBm	



**SAW Components**

**R2706**

**SAW resonator**

**915.00 MHz**

Data sheet



## References

<b>Type</b>	R2706
<b>Ordering code</b>	B39921R2706U310
<b>Marking and package</b>	C61157-A7-A56
<b>Packaging</b>	F61074-V8169-Z000
<b>Date codes</b>	L_1126
<b>Soldering profile</b>	S_6001
<b>RoHS compatible</b>	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."

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