

# **SAW Components**

## SAW RF filter

Short range devices

Series/type: B4301

Ordering code: B39921B4301F210

Date: December 01, 2010

Version: 2.0

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SAW Components B4301
SAW RF filter 915.00 MHz

**Data sheet** 



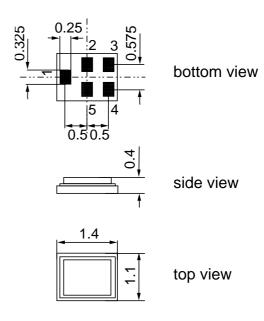
## **Application**

- Low-loss RF filter for remote control receivers
- No matching network required for operation at 50  $\Omega$



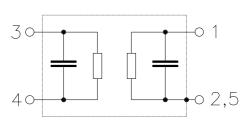
#### **Features**

- Package size 1.4 x 1.1 x 0.4 mm<sup>3</sup>
- Package code QCS5P
- RoHS compatible
- Approximate weight 0.003 g
- Package for Surface Mount Technology (SMT)
- Ni, gold-plated terminals
- AEC-Q200 qualified component family (operable temperature range –40°C to +85°C)
- Electrostatic Sensitive Device (ESD)



## Pin configuration

- 1 Input
- 4 Output
- 2,3,5 to be grounded





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Data sheet SMD

## **Characteristics**

Temperature range for specification:  $T = -40 \,^{\circ}\text{C}$  to +85  $^{\circ}\text{C}$ 

Terminating source impedance:  $Z_S = 50 \Omega$ Terminating load impedance:  $Z_L = 50 \Omega$ 

		min.	typ. @ 25 °C	max.	
Center frequency	f <sub>C</sub>	_	915.00	_	MHz
Maximum insertion attenuation	$\alpha_{max}$				
902.00 928.00 MHz	Z		1.5	2.5	dB
Amplitude ripple (p-p)	$\Delta \alpha$				
902.00 928.00 MHz	Z	_	0.9	1.8	dB
Attenuation	α				
10.00 800.00 MHz	<u>z</u>	42	50	_	dB
800.00 845.00 MHz	<u>z</u>	40	46	_	dB
845.00 880.00 MHz	<u>z</u>	35	43	_	dB
947.00 970.00 MHz	Z	13	22	_	dB
970.00 1020.00 MHz	<u>z</u>	33	39		dB
1020.00 1200.00 MHz	Z	35	41		dB

## **Maximum ratings**

Operable temperature range	Т	-40/+85	°C	
Storage temperature range	$T_{stg}$	-40/+85	°C	
DC voltage	$V_{DC}$	0	V	
Source power	$P_S$	10	dBm	source impedance 50 $\Omega$



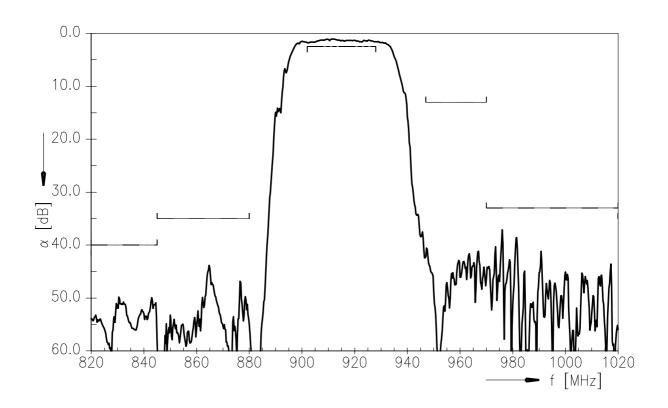
SAW Components

SAW RF filter

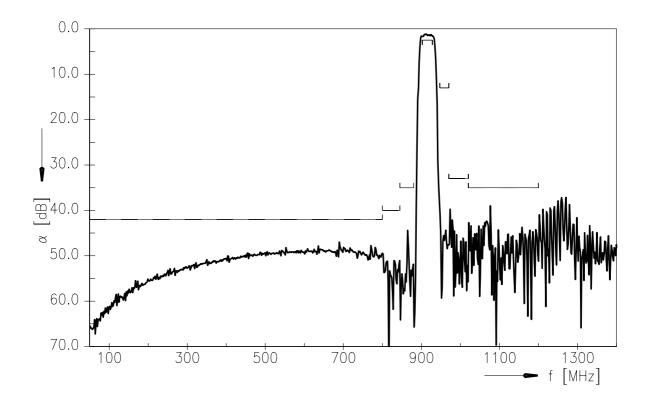
915.00 MHz

Data sheet

Transfer function



## Transfer function (wideband)





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**Data sheet** 



### References

Туре	B4301
Ordering code	B39921B4301F210
Marking and package	C61157-A8-A9
Packaging	F61074-V8212-Z000
Date codes	L_1126
S-parameters	B4301_NB.s2p, B4301_WB.s2p See file header for port/pin assignment table.
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."
Moldability	Before using in overmolding environment, please contact your EPCOS sales office.
Matching coils	See Inductor pdf-catalog <a href="http://www.tdk.co.jp/tefe02/coil.htm#aname1">http://www.tdk.co.jp/tefe02/coil.htm#aname1</a> and Data Library for circuit simulation <a href="http://www.tdk.co.jp/etvcl/index.htm">http://www.tdk.co.jp/etvcl/index.htm</a>

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