



RF360 Europe GmbH

A Qualcomm – TDK Joint Venture

## 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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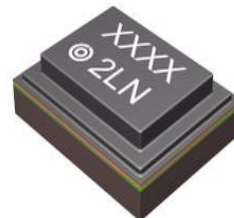
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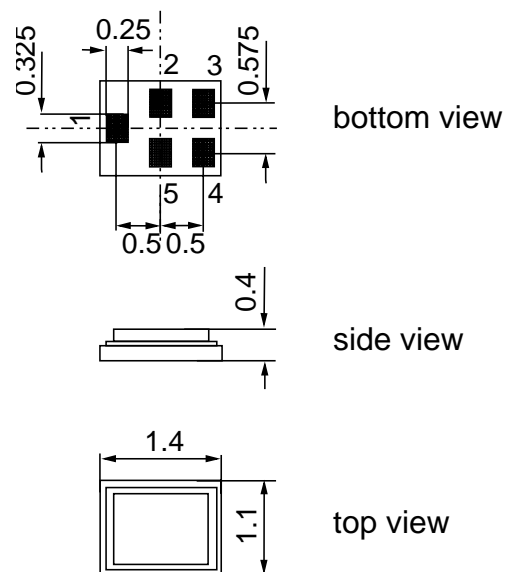
Data sheet


**Application**

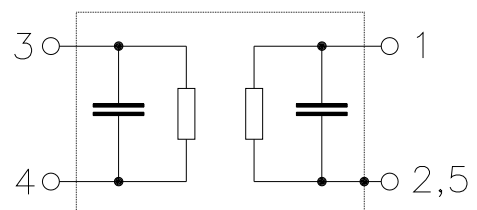
- Low-loss RF filter for remote control receivers
- No matching network required for operation at 50 Ω


**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



Data sheet


**Characteristics**

Temperature range for specification:  $T = -40\text{ °C to }+85\text{ °C}$   
 Terminating source impedance:  $Z_S = 50\ \Omega$   
 Terminating load impedance:  $Z_L = 50\ \Omega$

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

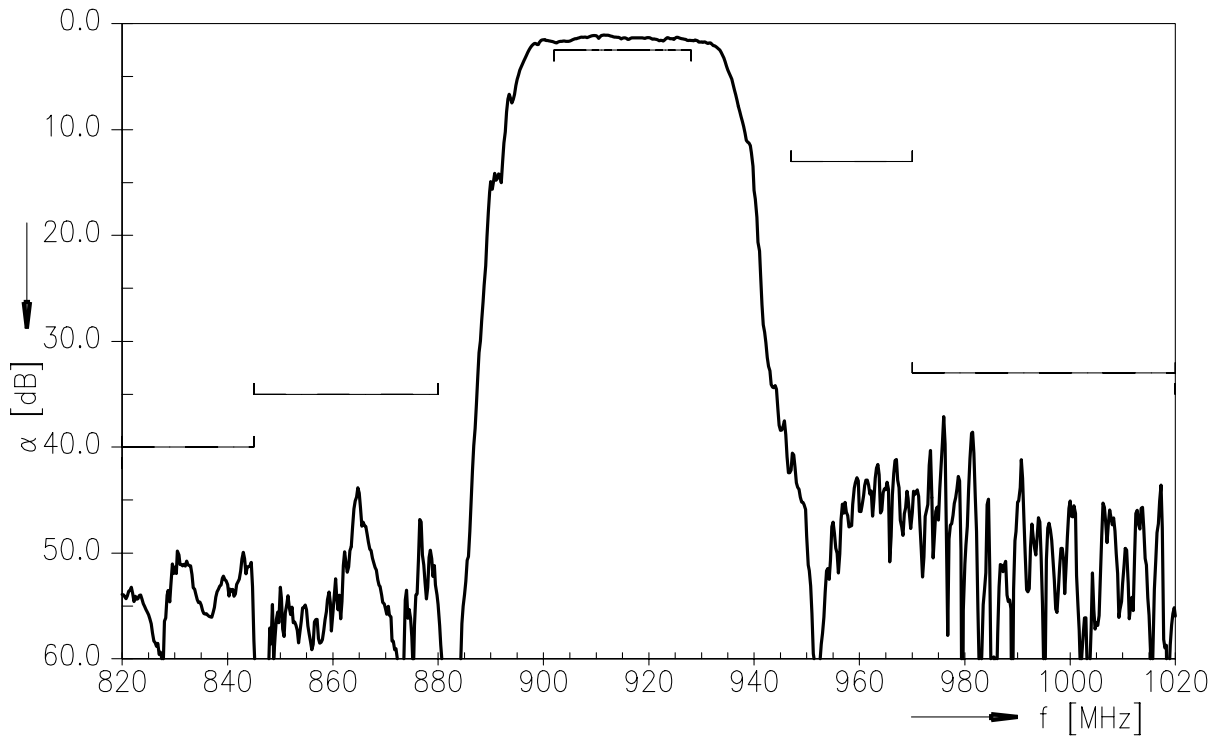
**Maximum ratings**

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

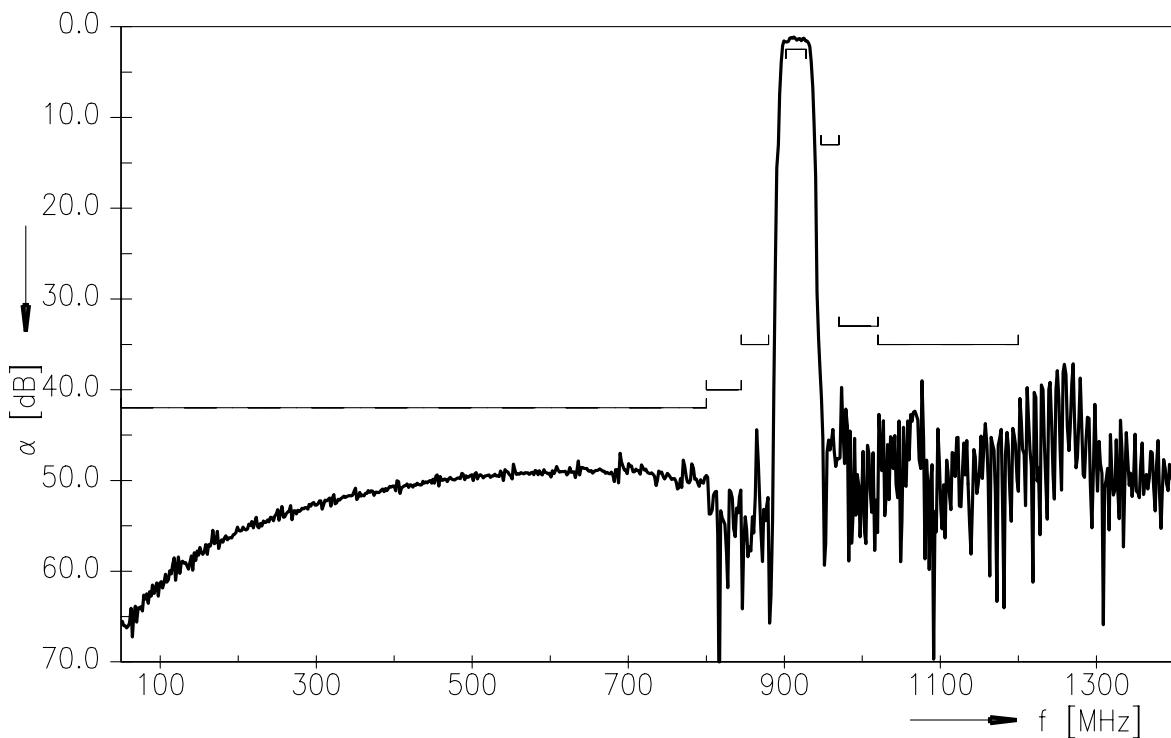
Data sheet



**Transfer function**



**Transfer function (wideband)**




**References**

<b>Type</b>	B4301
<b>Ordering code</b>	B39921B4301F210
<b>Marking and package</b>	C61157-A8-A9
<b>Packaging</b>	F61074-V8212-Z000
<b>Date codes</b>	L_1126
<b>S-parameters</b>	B4301_NB.s2p, B4301_WB.s2p See file header for port/pin assignment table.
<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."
<b>Moldability</b>	Before using in overmolding environment, please contact your EPCOS sales office.
<b>Matching coils</b>	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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