SAW Components

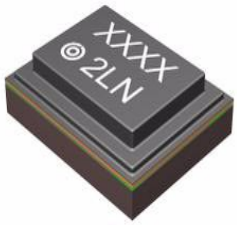
SAW RF filter

Short range devices

Series/type:	**B4301**
Ordering code:	**B39921B4301F210**
Date:	December 01, 2010
Version:	2.0

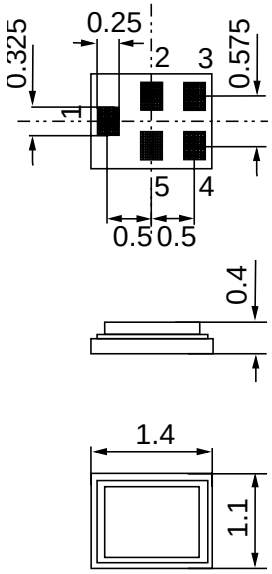
Application

- 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 mm³
- Package code QCS5P
- RoHS compatible
- Approximate weight 0.003 g
- Package for **S**urface **M**ount **T**echnology (**SMT**)
- Ni, gold-plated terminals
- AEC-Q200 qualified component family (operable temperature range –40˚C to +85˚C)
- **E**lectrostatic **S**ensitive **D**evice (**ESD**)



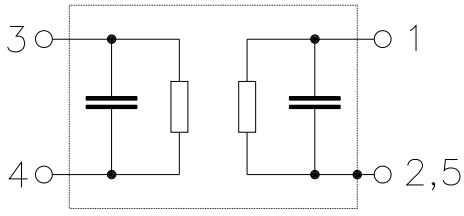
bottom view

side view

top view

Pin configuration

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



Data sheet SMD

Characteristics

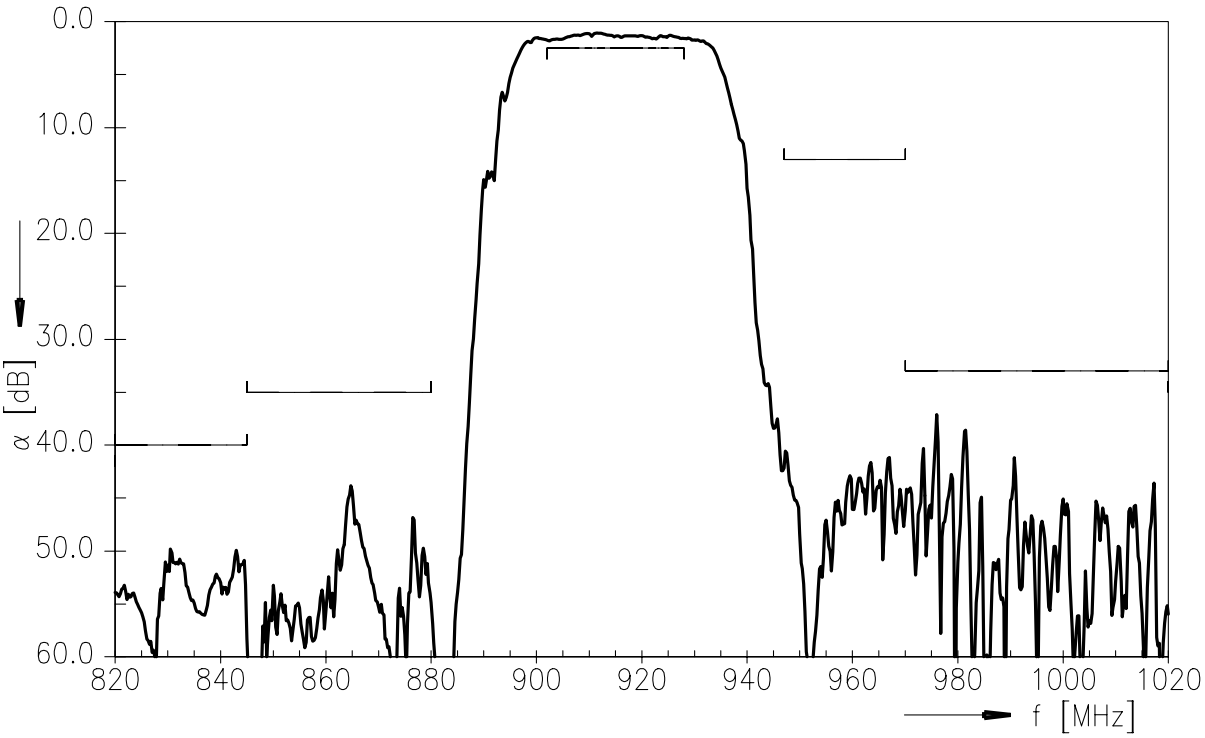
Temperature range for specification: T = –40 ˚C to +85 ˚C
Terminating source impedance: Z_S = 50 Ω
Terminating load impedance: Z_L = 50 Ω

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

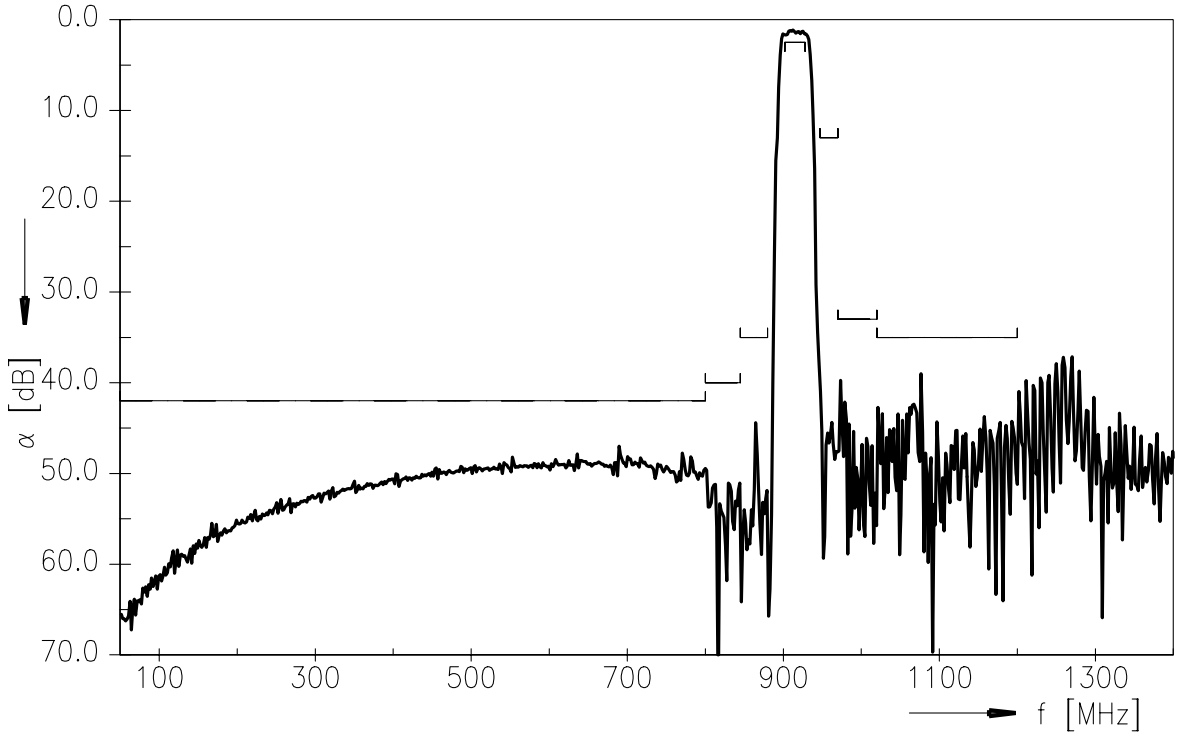
Maximum ratings

Operable temperature range	T	–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 Ω

Transfer function



Transfer function (wideband)



References

Type	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 http://www.tdk.co.jp/tefe02/coil.htm#aname1 and Data Library for circuit simulation http://www.tdk.co.jp/etvcl/index.htm

For further information please contact your local EPCOS sales office or visit our webpage at www.epcos.com .

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