



SAW Components

SAW filter

Short range devices

Series/type:	B3711
Ordering code:	B39321B3711U410
Date:	June 11, 2007
Version:	2.0



SAW Components

B3711

SAW filter

315.00 MHz

Data sheet

SMD

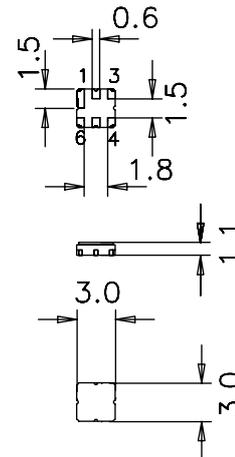
Application

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



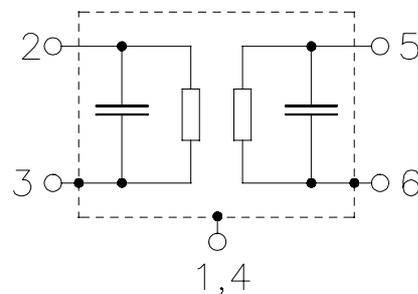
Features

- Package size 3.0 x 3.0 x 1.1 mm³
- Package code DCC6C
- RoHS compatible
- Approximate weight 0.037 g
- Package for **Surface Mount Technology (SMT)**
- Ni, gold-plated terminals
- Lead free soldering compatible with J - STD20C
- Passivation layer Elpas
- AEC-Q200 qualified component family
- **Electrostatic Sensitive Device (ESD)**



Pin configuration

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



Please read *cautions and warnings and important notes* at the end of this document.



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Characteristics

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

		min.	typ. @ 25 °C	max.	
Center frequency	f _C	—	315.00	—	MHz
Maximum insertion attenuation	α _{max}	—	1.7	2.5	dB
	314.70 ... 315.30 MHz				
Amplitude ripple (p-p)	Δα	—	0.4	1.2	dB
	314.70 ... 315.30 MHz				
Input VSWR		—	1.2	1.6	
	314.70 ... 315.30 MHz				
Output VSWR		—	1.2	1.6	
	314.70 ... 315.30 MHz				
Relative attenuation (relative to α_{min})	α _{rel}				dB
	270.00 ... 286.00 MHz	55	60	—	dB
	293.00 ... 293.90 MHz	53	58	—	dB
	304.00 ... 304.60 MHz	48	53	—	dB
	325.40 ... 326.00 MHz	24	31	—	dB
	336.10 ... 337.00 MHz	36	41	—	dB
	357.50 ... 358.70 MHz	50	55	—	dB
Temperature coefficient of frequency	TCf	—	-30	—	ppm/K



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Characteristics

Temperature range for specification: $T = -45\text{ °C to }+105\text{ °C}$
 Terminating source impedance: $Z_S = 50\Omega$
 Terminating load impedance: $Z_L = 50\Omega$

		min.	typ. @ 25 °C	max.	
Center frequency	f_C	—	315.00	—	MHz
Maximum insertion attenuation	α_{max}	—	1.7	2.9	dB
314.70 ... 315.30 MHz					
Amplitude ripple (p-p)	$\Delta\alpha$	—	0.4	1.6	
314.70 ... 315.30 MHz					
Input VSWR		—	1.2	1.9	
314.70 ... 315.30 MHz					
Output VSWR		—	1.2	1.9	
314.70 ... 315.30 MHz					
Relative attenuation (relative to α_{min})	α_{rel}				
270.00 ... 286.00 MHz		55	60	—	dB
293.00 ... 293.90 MHz		53	58	—	dB
304.00 ... 304.60 MHz		48	53	—	dB
325.40 ... 326.00 MHz		24	31	—	dB
336.10 ... 337.00 MHz		36	41	—	dB
357.50 ... 358.70 MHz		50	55	—	dB

Maximum ratings

Operable temperature range	T	-45/+125	°C	
Storage temperature range	T _{stg}	-45/+125	°C	
DC voltage	V _{DC}	0	V	
Source power	P _S	10	dBm	source impedance 50 Ω

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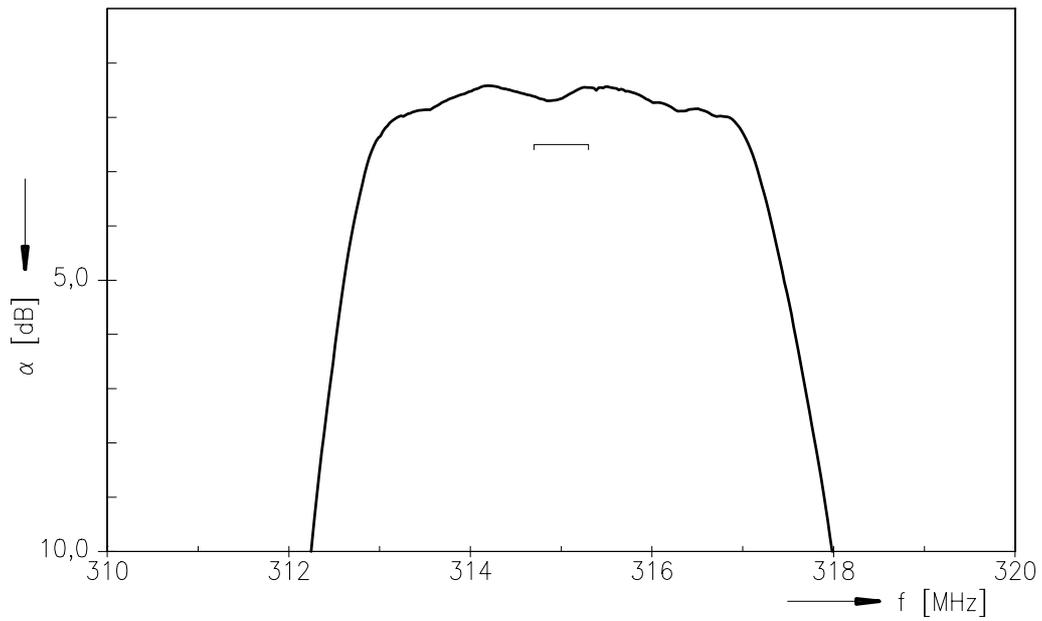
SAW filter

315.00 MHz

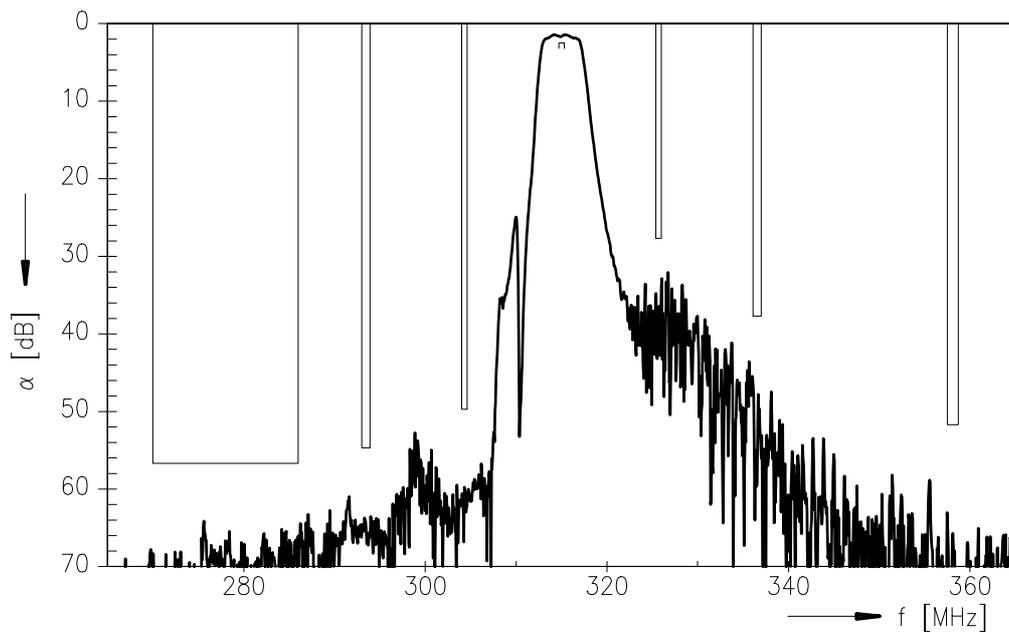
Data sheet



Transfer function



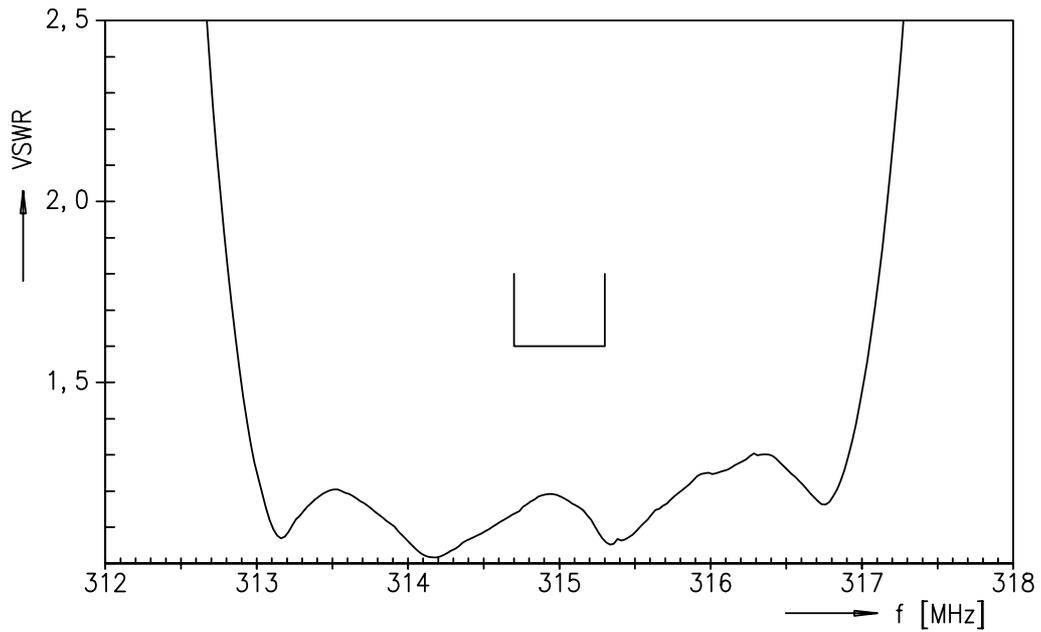
Transfer function (wideband)



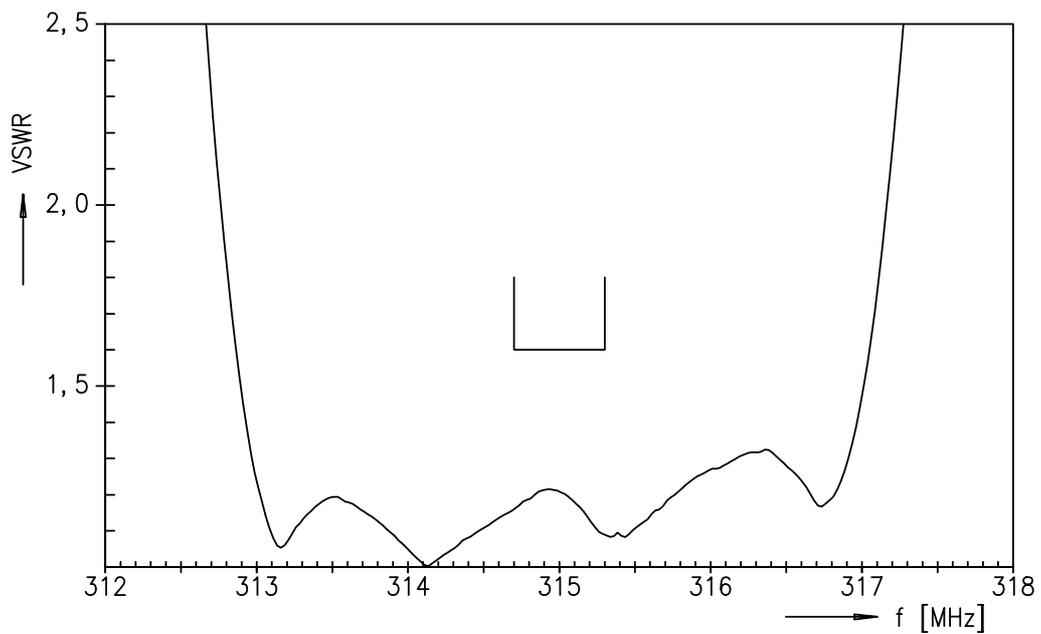
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Input VSWR



Output VSWR





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References

Type	B3711
Ordering code	B39321B3711U410
Marking and package	C61157-A7-A67
Packaging	F61074-V8168-Z000
Date codes	L_1126
S-parameters	B3711_SB.s2p B3711_WB.s2p
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.

Published by EPCOS AG
Surface Acoustic Wave Components Division
P.O. Box 80 17 09, 81617 Munich, GERMANY

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Please read *cautions and warnings and important notes* at the end of this document.



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