



SAW Components

SAW filter

Short range devices

Series/type:	B3721
Ordering code:	B39431B3721U410
Date:	March 25, 2009
Version:	2.2

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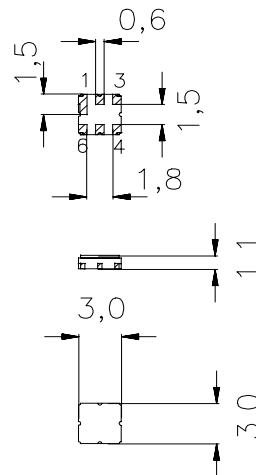
Application

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



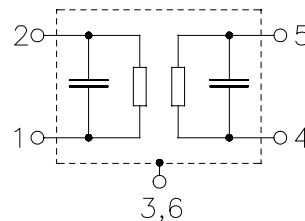
Features

- 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





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433.92 MHz

Data sheet



Characteristics

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

		min.	typ.	max.	
Center frequency	f_C	—	433.92	—	MHz
Maximum insertion attenuation	α_{\max}	—	2.6	2.9	dB
433.12 ... 434.72 MHz					
Amplitude ripple (p-p)	$\Delta\alpha$	—	0.4	0.8	dB
433.12 ... 434.72 MHz					
Input VSWR		—	1.8	2.0	
433.12 ... 434.72 MHz					
Output VSWR		—	1.8	2.0	
433.12 ... 434.72 MHz					
Attenuation	α				
10.00 ... 380.00 MHz		60	65	—	dB
380.00 ... 423.42 MHz		46	51	—	dB
423.42 ... 427.42 MHz		30	34	—	dB
427.42 ... 429.42 MHz		14	17	—	dB
438.42 ... 444.42 MHz		12	16	—	dB
444.42 ... 460.00 MHz		32	37	—	dB
460.00 ... 700.00 MHz		52	58	—	dB
700.00 ... 1000.00 MHz		48	51	—	dB

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



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.	
Center frequency	f_C	—	433.92	—	MHz
Maximum insertion attenuation	α_{max}	—	2.6	2.9	dB
433.12 ... 434.72 MHz					
Amplitude ripple (p-p)	$\Delta\alpha$	—	0.4	1.0	dB
433.12 ... 434.72 MHz					
Input VSWR		—	1.8	2.0	
433.12 ... 434.72 MHz					
Output VSWR		—	1.8	2.0	
433.12 ... 434.72 MHz					
Attenuation	α				dB
10.00 ... 380.00 MHz		60	65	—	dB
380.00 ... 423.42 MHz		46	51	—	dB
423.42 ... 427.42 MHz		30	34	—	dB
427.42 ... 429.42 MHz		7	17	—	dB
438.42 ... 444.42 MHz		6	16	—	dB
444.42 ... 460.00 MHz		32	37	—	dB
460.00 ... 700.00 MHz		52	58	—	dB
700.00 ... 1000.00 MHz		48	51	—	dB



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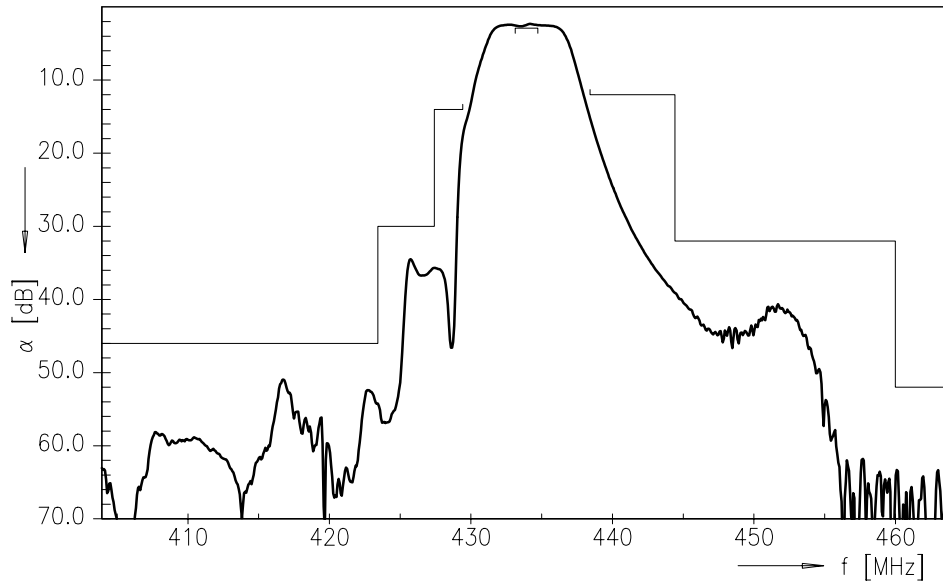
Maximum ratings

Operable temperature range	T	-45/+125	°C	
Storage temperature range	T _{stg}	-45/+125	°C	
DC voltage	V _{DC}	6	V	
Source power	P _S	10	dBm	source impedance 50 Ω
Source power 433.12 MHz to 434.72 MHz	P _S	13	dBm	duty cycle 1:10, -40 °C to +85 °C

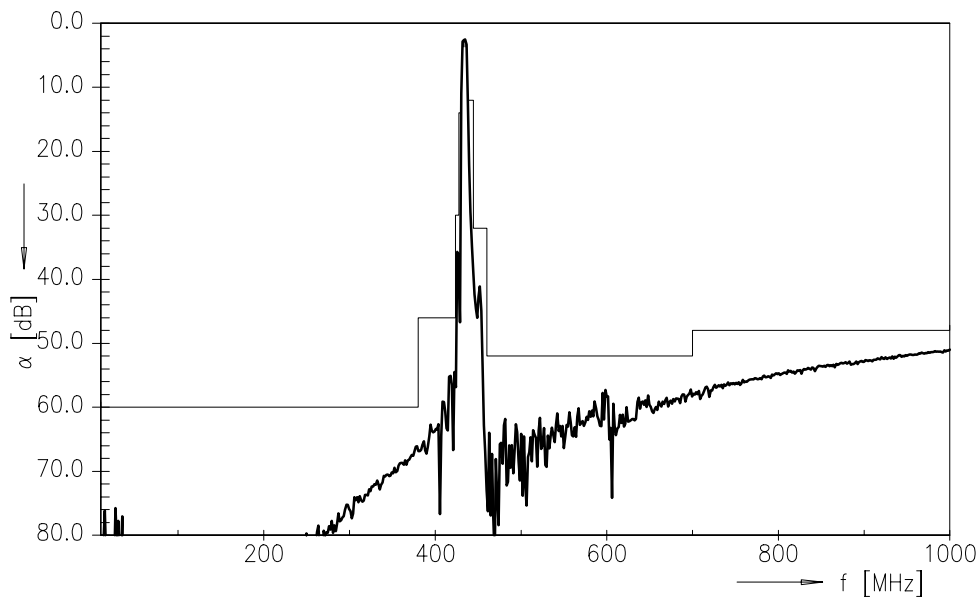
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Transfer function



Transfer function (wideband)



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References

Type	B3721
Ordering code	
Marking and package	C61157-A7-A67
Packaging	F61074-V8168-Z000
Date codes	L_1126
S-parameters	B3721_SB.s2p B3721_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 .

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

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