



SAW Components

SAW filter

Short range devices

Series/type:	B3710
Ordering code:	B39431B3710U410
Date:	July 21, 2009
Version:	2.3



SAW Components	B3710
SAW filter	433.92 MHz

Data sheet



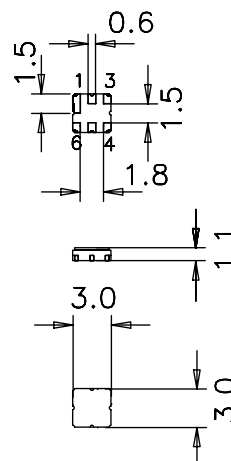
Application

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



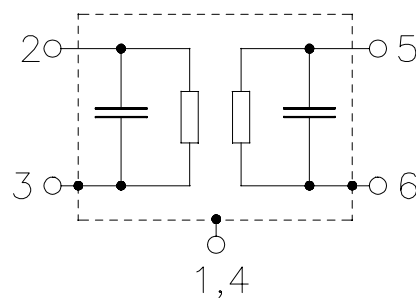
Features

- 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)





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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	$\alpha_{\max}$	—	2.0	2.7	dB
	433.00 ... 434.71 MHz				
Amplitude ripple (p-p)	$\Delta\alpha$	—	0.5	1.3	dB
	433.00 ... 434.71 MHz				
Attenuation	α				
	10.00 ... 380.00 MHz	55	60	—	dB
	380.00 ... 413.50 MHz	49	53	—	dB
	413.50 ... 424.00 MHz	40	48	—	dB
	443.75 ... 454.00 MHz	25	33	—	dB
	454.00 ... 470.00 MHz	35	44	—	dB
	470.00 ... 650.00 MHz	48	55	—	dB
	650.00 ... 1000.00 MHz	40	50	—	dB



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Characteristics

Temperature range for specification:	T = -45 °C to +105 °C
Terminating source impedance:	Z _S = 50Ω
Terminating load impedance:	Z _L = 50Ω

		min.	typ. @ 25 °C	max.	
Center frequency	f _C	—	433.92	—	MHz
Maximum insertion attenuation	α _{max}	—	2.0	3.1	dB
433.00 ... 434.71 MHz					
Amplitude ripple (p-p)	Δα	—	0.5	1.7	dB
433.00 ... 434.71 MHz					
Attenuation	α				
10.00 ... 380.00 MHz		55	60	—	dB
380.00 ... 413.50 MHz		49	53	—	dB
413.50 ... 424.00 MHz		37	48	—	dB
443.75 ... 454.00 MHz		25	33	—	dB
454.00 ... 470.00 MHz		35	44	—	dB
470.00 ... 650.00 MHz		48	55	—	dB
650.00 ... 1000.00 MHz		40	50	—	dB

s

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
Source power	P _S	13	dBm	1000 hours, duty cycle 1:10, -40 °C to +85 °C

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



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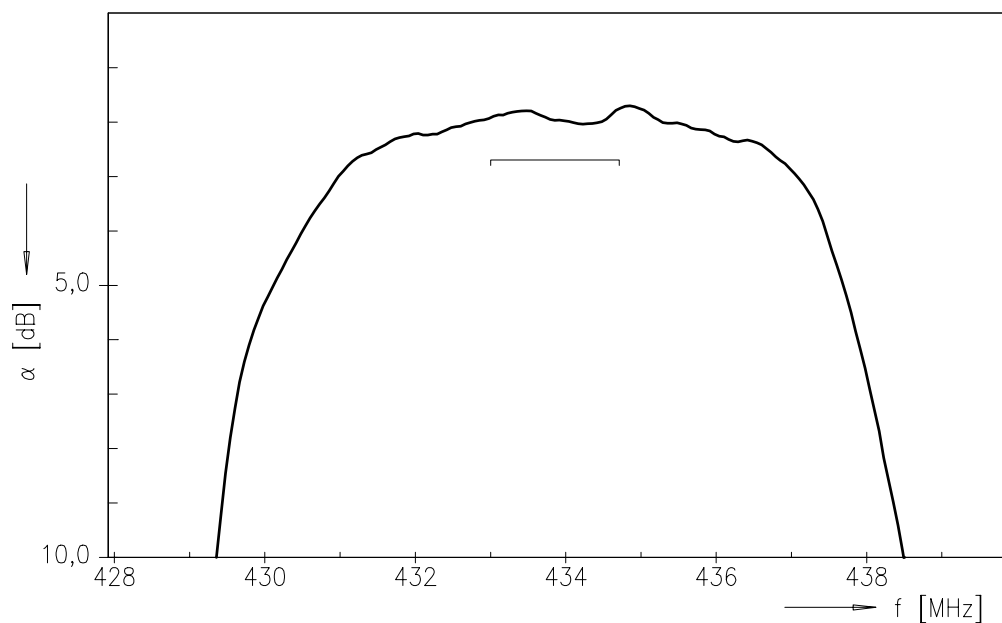
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433.92 MHz

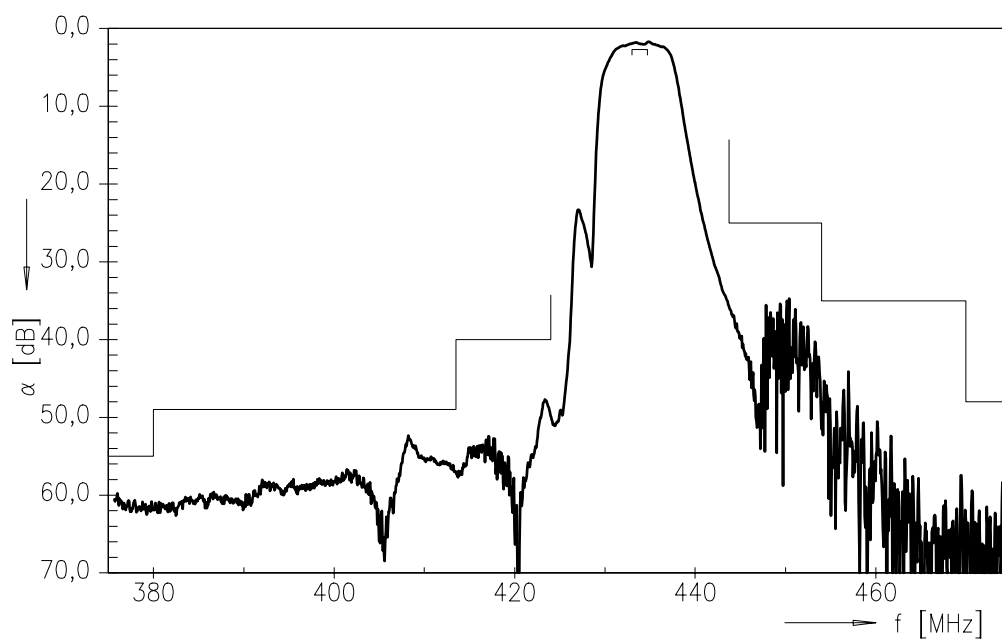
Data sheet

SMD

Transfer function



Transfer function (wideband)





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Data sheet	SMD

References

Type	B3710
Ordering code	B39431B3710U410
Marking and package	C61157-A7-A67
Packaging	F61074-V8168-Z000
Date codes	L_1126
S-parameters	B3710_SB.s2p B3710_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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