



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



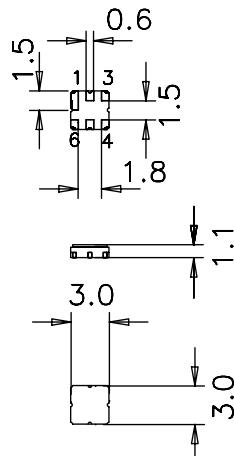
Application

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



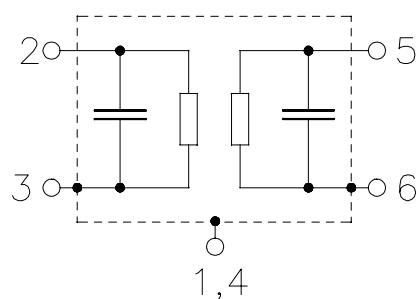
Features

- Package size $3.0 \times 3.0 \times 1.1 \text{ mm}^3$
- 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.

**SAW Components****B3710****SAW filter****433.92 MHz****Data sheet****Characteristics**Temperature range for specification: $T = -40^{\circ}\text{C}$ to $+85^{\circ}\text{C}$ 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 433.00 ... 434.71 MHz	α_{\max}	—	2.0	2.7	dB
Amplitude ripple (p-p) 433.00 ... 434.71 MHz	$\Delta\alpha$	—	0.5	1.3	dB
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

**SAW Components****B3710****SAW filter****433.92 MHz****Data sheet****Characteristics**Temperature range for specification: $T = -45^{\circ}\text{C}$ to $+105^{\circ}\text{C}$ 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 433.00 ... 434.71 MHz	α_{\max}	—	2.0	3.1	dB
Amplitude ripple (p-p) 433.00 ... 434.71 MHz	$\Delta\alpha$	—	0.5	1.7	dB
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

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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}	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

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B3710

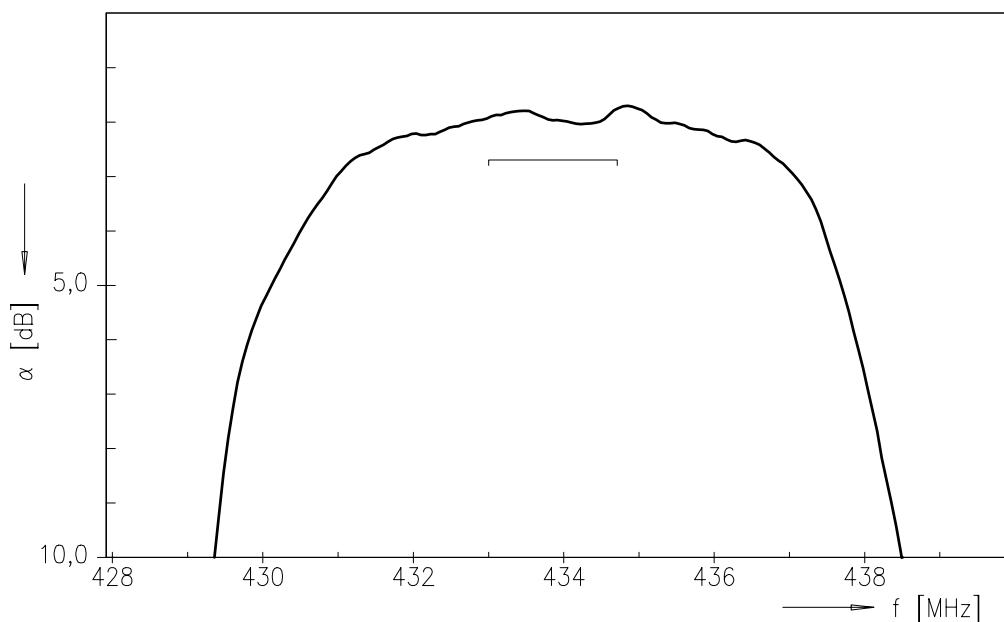
SAW filter

433.92 MHz

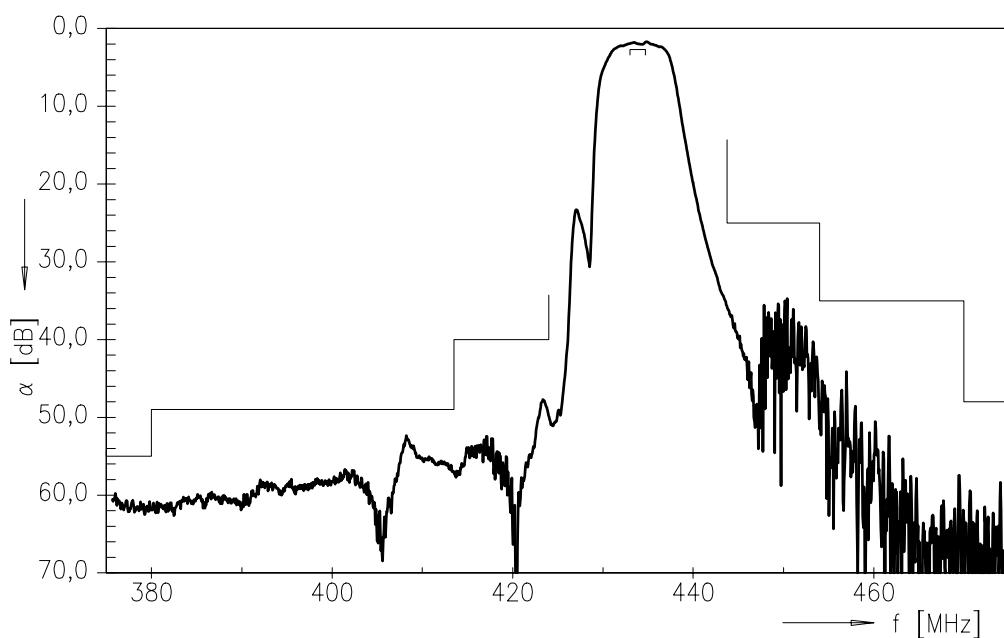
Data sheet



Transfer function



Transfer function (wideband)



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SAW Components	B3710
SAW filter	433.92 MHz
Data sheet	

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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