



SAW Components

SAW filter

Short range devices

Series/type:	B3716
Ordering code:	B39871B3716U410
Date:	September 21, 2009
Version:	2.2



SAW Components	B3716
SAW filter	869.00 MHz

Data sheet



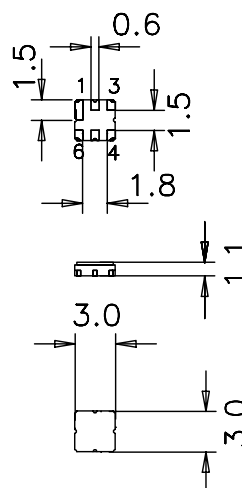
Application

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



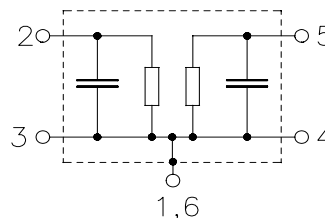
Features

- 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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Characteristics

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

		min.	typ.	max.	
Center frequency	f_C	—	869.00	—	MHz
Maximum insertion attenuation	α_{\max}	—	2.5	3.0	dB
868.00 ... 870.00 MHz					
Amplitude ripple (p-p)	$\Delta\alpha$	—	0.3	0.7	dB
868.00 ... 870.00 MHz					
Attenuation	α				dB
10.00 ... 838.00 MHz		40	43	—	
838.00 ... 856.40 MHz		24	32	—	
856.40 ... 858.50 MHz		20	26	—	
880.00 ... 883.00 MHz		23	32	—	
883.00 ... 893.00 MHz		29	32	—	
893.00 ... 1200.00 MHz		45	48	—	
1200.00 ... 2000.00 MHz		31	35	—	
Temperature coefficient of frequency	TC_f	—	-30	—	ppm/K



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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	—	869.00	—	MHz
Maximum insertion attenuation	α_{max}	—	2.5	3.9	dB
868.00 ... 870.00 MHz					
Amplitude ripple (p-p)	$\Delta\alpha$	—	0.6	1.6	
868.00 ... 870.00 MHz					
Attenuation	α				dB
10.00 ... 838.00 MHz		40	43	—	
838.00 ... 856.40 MHz		24	32	—	
856.40 ... 858.50 MHz		14	26	—	
880.00 ... 883.00 MHz		10	32	—	
883.00 ... 893.00 MHz		29	32	—	
893.00 ... 1200.00 MHz		45	48	—	
1200.00 ... 2000.00 MHz		31	35	—	
Temperature coefficient of frequency	TC_f	—	-30	—	ppm/K

Maximum ratings

Operable temperature range	T	-45/+125	°C	
Storage temperature range	T_{stg}	-45/+125	°C	
DC voltage	V_{DC}	5	V	
Source power	P_S	13	dBm	source impedance 50 Ω
Source power 868 MHz to 870 MHz	P_S	18	dBm	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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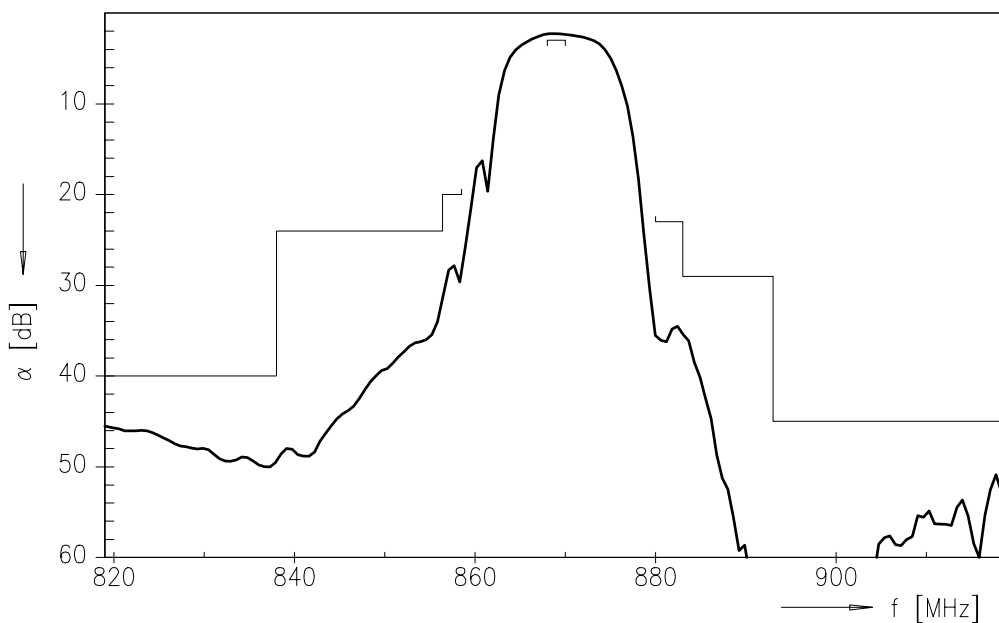
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869.00 MHz

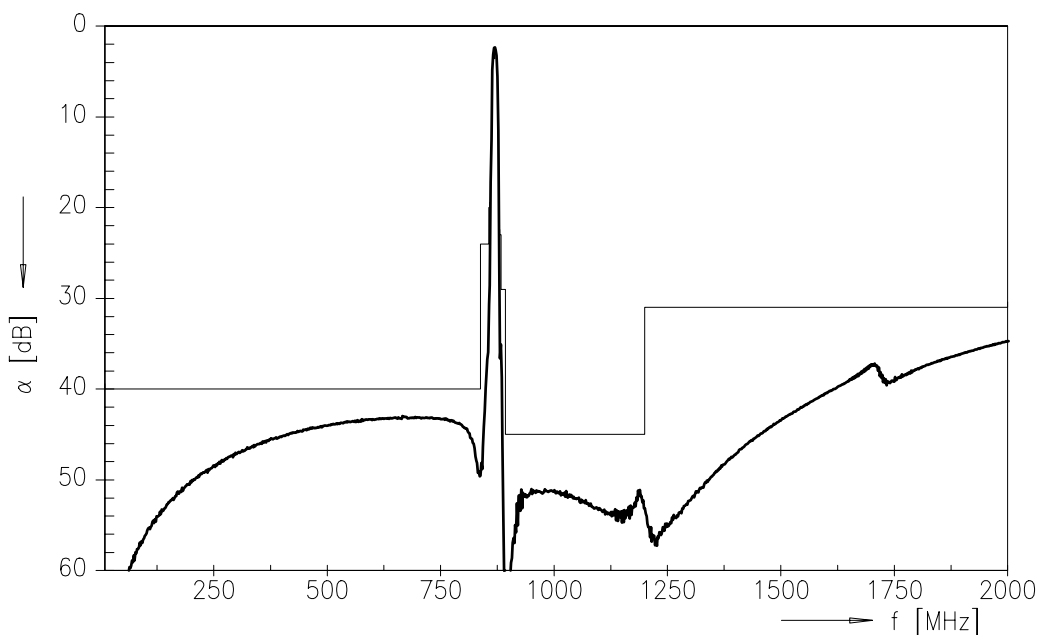
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Transfer function



Transfer function (wideband)



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References

Type	B3716
Ordering code	B39871B3716U410
Marking and package	C61157-A7-A67
Packaging	F61074-V8168-Z000
Date codes	L_1126
S-parameters	B3716_SB.s2p B3716_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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