



## SAW Components

### SAW filter

Short range devices

<b>Series/type:</b>	<b>B3715</b>
<b>Ordering code:</b>	<b>B39871B3715U410</b>
<b>Date:</b>	<b>February 06, 2008</b>
<b>Version:</b>	<b>2.1</b>



<b>SAW Components</b>	<b>B3715</b>
<b>SAW filter</b>	<b>869.00 MHz</b>

Data sheet



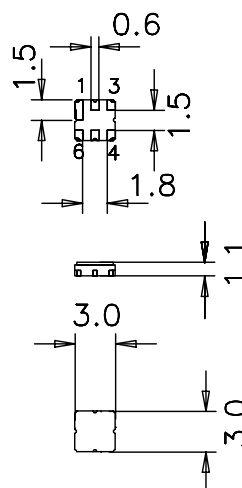
### Application

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



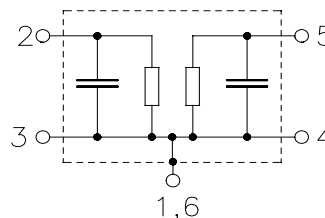
### Features

- Package size 3.0 x 3.0 x 1.1 mm<sup>3</sup>
- 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.	
<b>Center frequency</b>	$f_C$	—	869.00	—	MHz
<b>Maximum insertion attenuation</b>	$\alpha_{\max}$	—	2.4	3.1	dB
868.00 ... 870.00 MHz					
<b>Amplitude ripple (p-p)</b>	$\Delta\alpha$	—	0.6	1.2	dB
868.00 ... 870.00 MHz					
<b>Attenuation</b>	$\alpha$				dB
10.00 ... 845.00 MHz		37	41	—	
845.00 ... 851.00 MHz		32	36	—	
851.00 ... 858.00 MHz		20	24	—	
883.00 ... 892.00 MHz		35	40	—	
892.00 ... 1000.00 MHz		42	47	—	
<b>Temperature coefficient of frequency</b>	$TC_f$	—	-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.	max.	
<b>Center frequency</b>	$f_C$	—	869.00	—	MHz
<b>Maximum insertion attenuation</b>	$\alpha_{max}$	—	2.6	3.3	dB
868.00 ... 870.00 MHz					
<b>Amplitude ripple (p-p)</b>	$\Delta\alpha$	—	0.6	1.2	
868.00 ... 870.00 MHz					
<b>Attenuation</b>	$\alpha$				
10.00 ... 845.00 MHz		37	41	—	dB
845.00 ... 851.00 MHz		32	36	—	dB
851.00 ... 856.80 MHz		20	24	—	dB
883.00 ... 892.00 MHz		20	35	—	dB
892.00 ... 1000.00 MHz		42	47	—	dB
<b>Temperature coefficient of frequency</b>	$TC_f$	—	-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 $\Omega$
Source power 868 MHz to 870 MHz	$P_S$	18	dBm	duty cycle 1:10, -40 °C to +85 °C

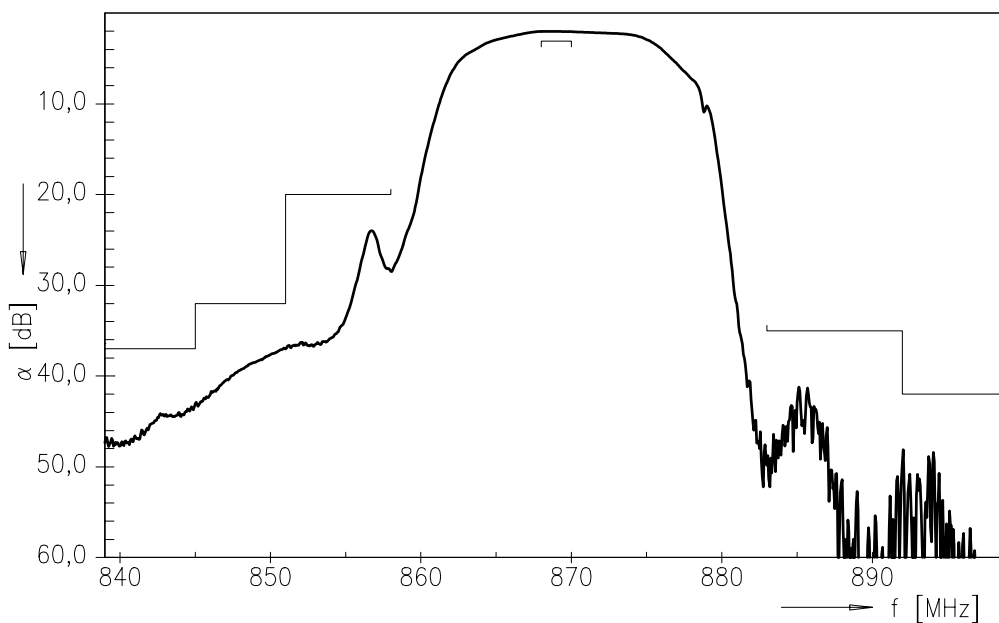


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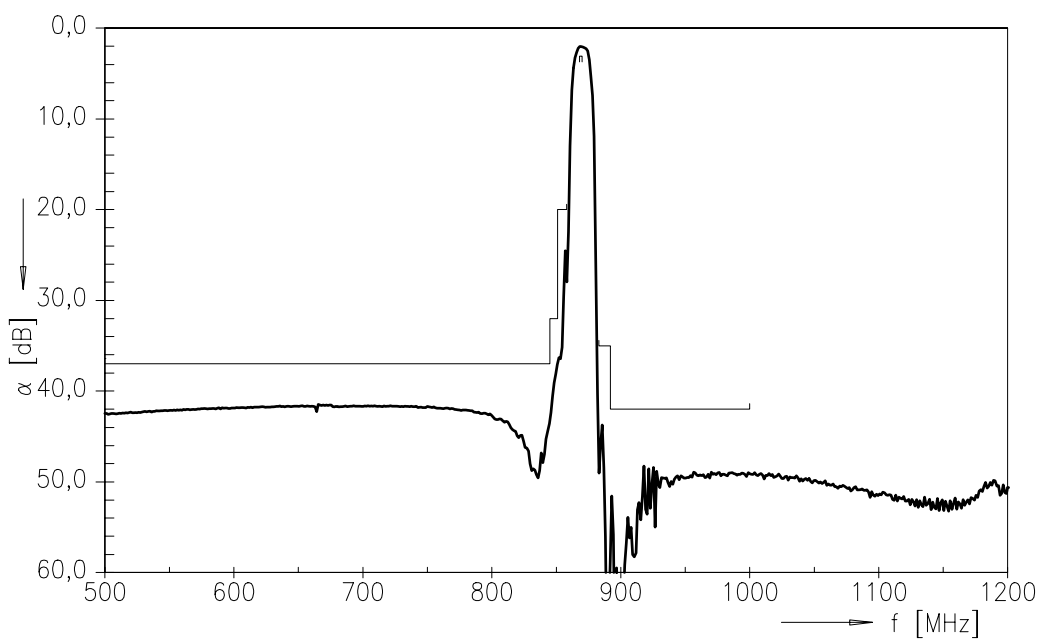
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**Transfer function**



**Transfer function (wideband)**



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



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#### References

<b>Type</b>	B3715
<b>Ordering code</b>	B39871B3715U410
<b>Marking and package</b>	C61157-A7-A67
<b>Packaging</b>	F61074-V8168-Z000
<b>Date codes</b>	L_1126
<b>S-parameters</b>	B3715_SB.s2p B3715_WB.s2p
<b>Soldering profile</b>	S_6001
<b>RoHS compatible</b>	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](http://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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