



## **SAW Components**

### **SAW filter**

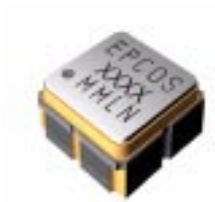
Short range devices

<b>Series/type:</b>	<b>B3714</b>
<b>Ordering code:</b>	<b>B39311B3714U410</b>
<b>Date:</b>	<b>January 17, 2008</b>
<b>Version:</b>	<b>2.2</b>



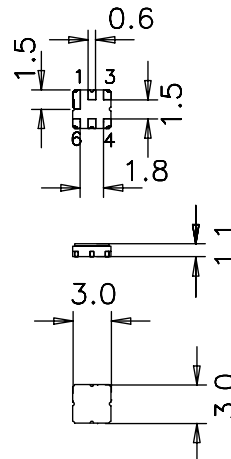
**Application**

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



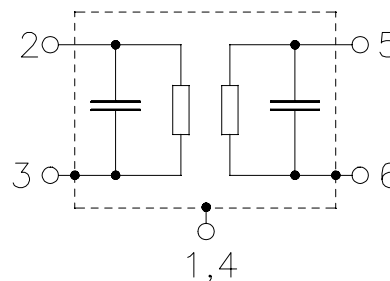
**Features**

- 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<sup>1)</sup>**

- 2 Input
- 5 Output
- 1,3,4,6 Ground



1) The recommended pin configuration usually offers best suppression of electrical crosstalk. The filter characteristics refer to this configuration.



<b>SAW Components</b>	<b>B3714</b>
<b>SAW filter</b>	<b>314.35 MHz</b>

Data sheet



**Characteristics**

Operating temperature range:  $T = -45\text{ °C to }+85\text{ °C}$   
 Terminating source impedance:  $Z_S = 50\ \Omega$   
 Terminating load impedance:  $Z_L = 50\ \Omega$

		min.	typ. @ 25 °C	max.	
<b>Center frequency</b>	$f_C$	—	314.35	—	MHz
<b>Maximum insertion attenuation</b> 314.05 ... 314.65 MHz	$\alpha_{max}$	—	1.9	2.5 <sup>1)</sup>	dB
<b>Amplitude ripple</b> 314.05 ... 314.65 MHz		—	0.4	1.2 <sup>2)</sup>	dB
<b>Relative attenuation (relative to <math>\alpha_{max}</math>)</b>	$\alpha_{rel}$				
270.00 ... 286.00 MHz		55	59	—	dB
292.65 ... 293.25 MHz		53	58	—	dB
303.35 ... 303.95 MHz		48 <sup>3)</sup>	56	—	dB
324.75 ... 325.35 MHz		28	35	—	dB
335.45 ... 336.05 MHz		50	56	—	dB
357.50 ... 358.70 MHz		50	55	—	dB

1)  $T = -45\text{ °C to }+105\text{ °C}$  : 2.9 dB

2)  $T = -45\text{ °C to }+105\text{ °C}$  : 1.6 dB

3)  $T = -45\text{ °C to }+105\text{ °C}$  : 46 dB

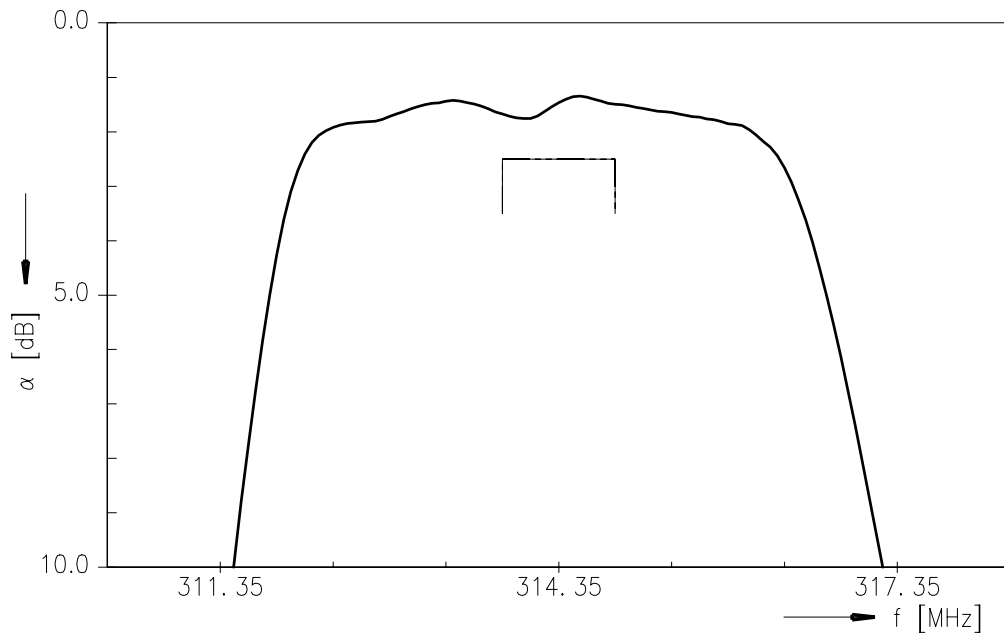
**Maximum ratings**

Operable temperature range	T	-45/+125	°C	
Storage temperature range	T <sub>stg</sub>	-45/+125	°C	
DC voltage	V <sub>DC</sub>	6	V	
Source power	P <sub>S</sub>	10	dBm	source impedance 50 Ω

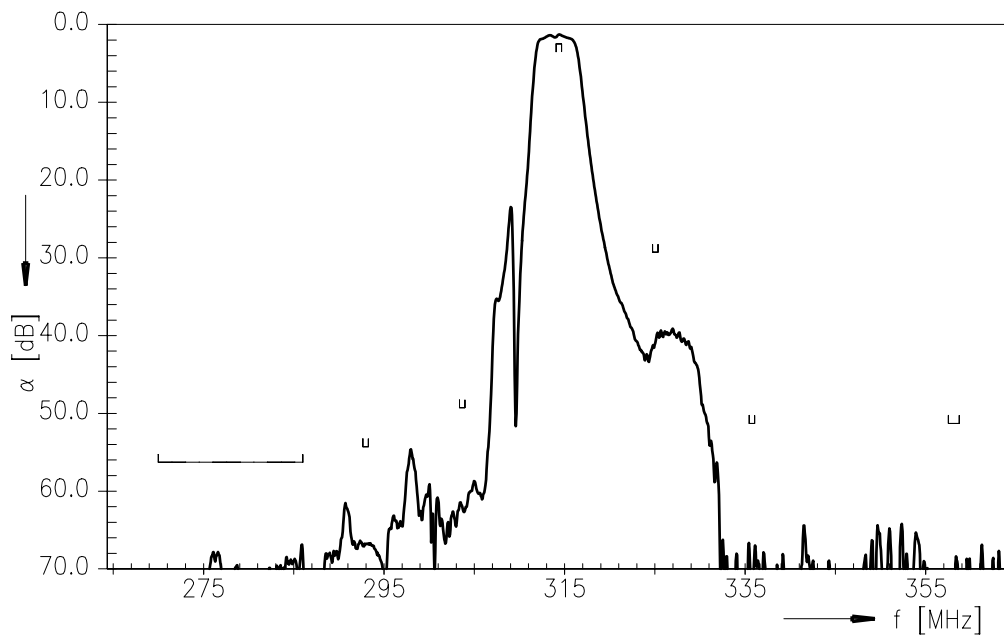
Please read *cautions and warnings and important notes* at the end of this document.



Transfer function



Transfer function (wideband)





**SAW Components** **B3714**

**SAW filter** **314.35 MHz**

Data sheet



### References

<b>Type</b>	B3714
<b>Ordering code</b>	B39311B3714U410
<b>Marking and package</b>	C61157-A7-A67
<b>Packaging</b>	F61074-V8168-Z000
<b>Date codes</b>	L_1126
<b>S-parameters</b>	B3714_NB.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."

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