SAW Components

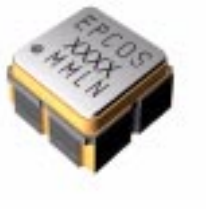
SAW filter

Short range devices

Series/type:	**B3714**
Ordering code:	**B39311B3714U410**
Date:	January 17, 2008
Version:	2.2

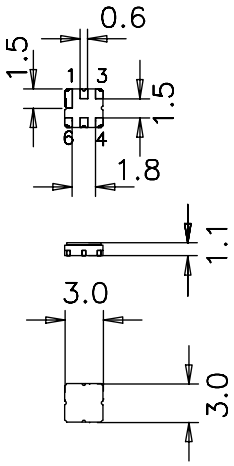
Application

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



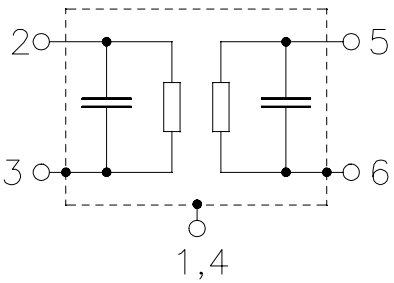
Features

- Package size 3.0 x 3.0 x 1.1 mm³
- Package code DCC6C
- RoHS compatible
- Approximate weight 0.037 g
- Package for **S**urface **M**ount **T**echnology (**SMT**)
- Ni, gold-plated terminals
- Lead free soldering compatible with J - STD20C
- Passivation layer Elpas
- AEC-Q200 qualified component family
- **E**lectrostactic **S**ensitive **D**evice (**ESD**)



Pin configuration[1)]

- 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.

Data sheet SMD

Characteristics

Operating temperature range: T = –45 ˚C to +85 ˚C
Terminating source impedance: Z_S = 50 Ω
Terminating load impedance: Z_L = 50 Ω

		min.	typ. @ 25 ˚C	max.	
Center frequency	f_C	—	314.35	—	MHz
Maximum insertion attenuation	α_{max}				
314.05 ... 314.65 MHz		—	1.9	2.5[1)]	dB
Amplitude ripple					
314.05 ... 314.65 MHz		—	0.4	1.2[2)]	dB
Relative attenuation (relative to α_{max})	α_{rel}				
270.00 ... 286.00 MHz		55	59	—	dB
292.65 ... 293.25 MHz		53	58	—	dB
303.35 ... 303.95 MHz		48[3)]	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˚C to +105˚C : 2.9 dB

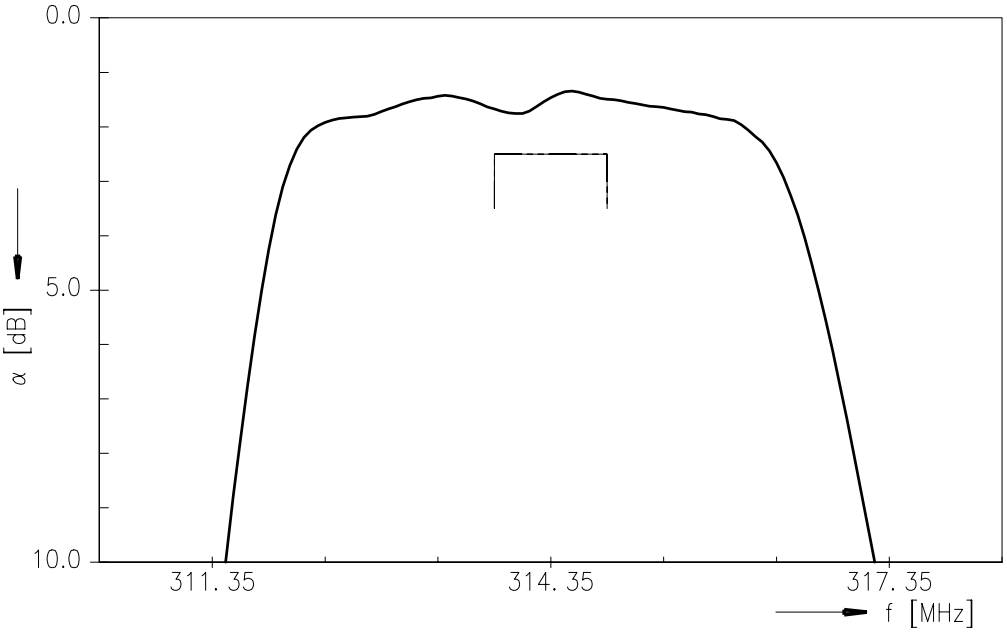
2) T = –45˚C to +105˚C : 1.6 dB

3) T = –45˚C to +105˚C : 46 dB

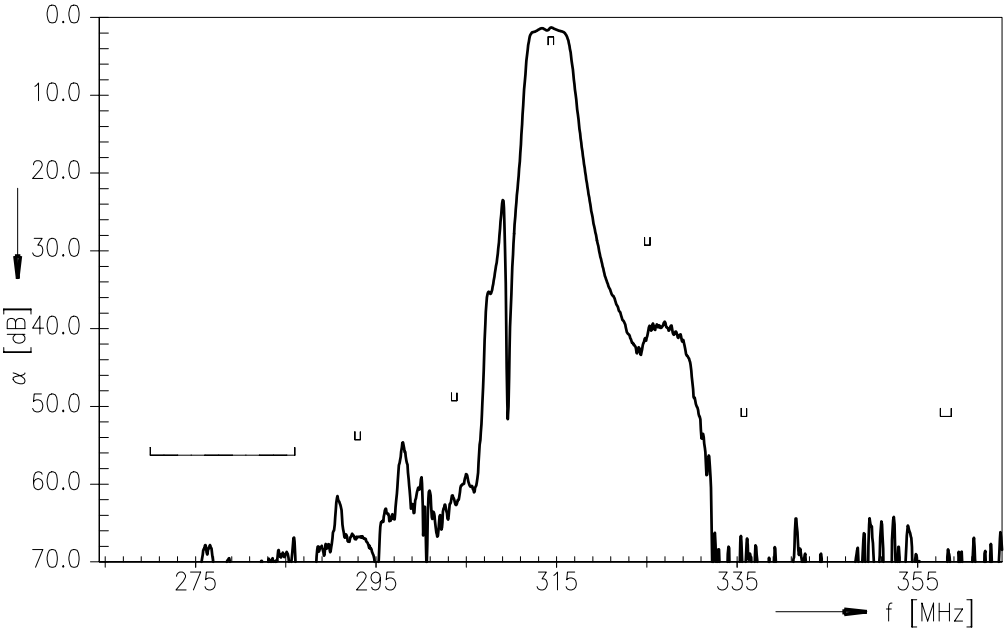
Maximum ratings

Operable temperature range	T	–45/+125	˚C	
Storage temperature range	T_{stg}	–45/+125	˚C	
DC voltage	V_{DC}	6	V	
Source power	P_S	10	dBm	source impedance 50 Ω

Transfer function



Transfer function (wideband)



References

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

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