



SAW Components

SAW filter

Short range devices

Series/type:	B3713
Ordering code:	B39311B3713U410
Date:	July 21, 2010
Version:	2.2

Data sheet



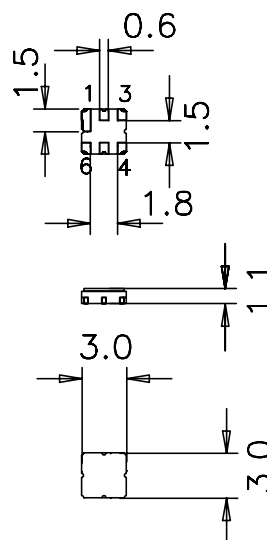
Application

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



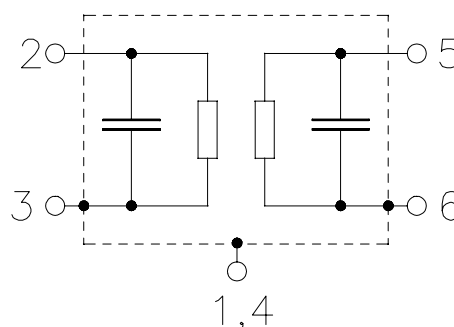
Features

- 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 configuration¹⁾

- 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


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	—	313.85	—	MHz
Maximum insertion attenuation	α_{\max}	—	1.7	2.5	dB
313.55 ... 314.15 MHz					
Amplitude ripple		—	0.4	1.2	dB
313.55 ... 314.15 MHz					
Relative attenuation (relative to α_{\max})	α_{rel}				
270.00 ... 286.00 MHz		55	60	—	dB
291.85 ... 292.75 MHz		53	58	—	dB
302.85 ... 303.45 MHz		48	53	—	dB
324.25 ... 324.85 MHz		28	35	—	dB
334.95 ... 335.85 MHz		50	55	—	dB
356.35 ... 357.55 MHz		50	55	—	dB

Data sheet


Characteristics

Temperature range for specification: $T = -30\text{ °C to }+110\text{ °C}$
 Terminating source impedance: $Z_S = 50\ \Omega$
 Terminating load impedance: $Z_L = 50\ \Omega$

		min.	typ. @ 25 °C	max.	
Center frequency	f_C	—	313.85	—	MHz
Maximum insertion attenuation	α_{\max}	—	1.7	3.5	dB
313.55 ... 314.15 MHz					
Amplitude ripple		—	0.4	2.2	dB
313.55 ... 314.15 MHz					
Relative attenuation (relative to α_{\max})	α_{rel}				
270.00 ... 286.00 MHz		55	60	—	dB
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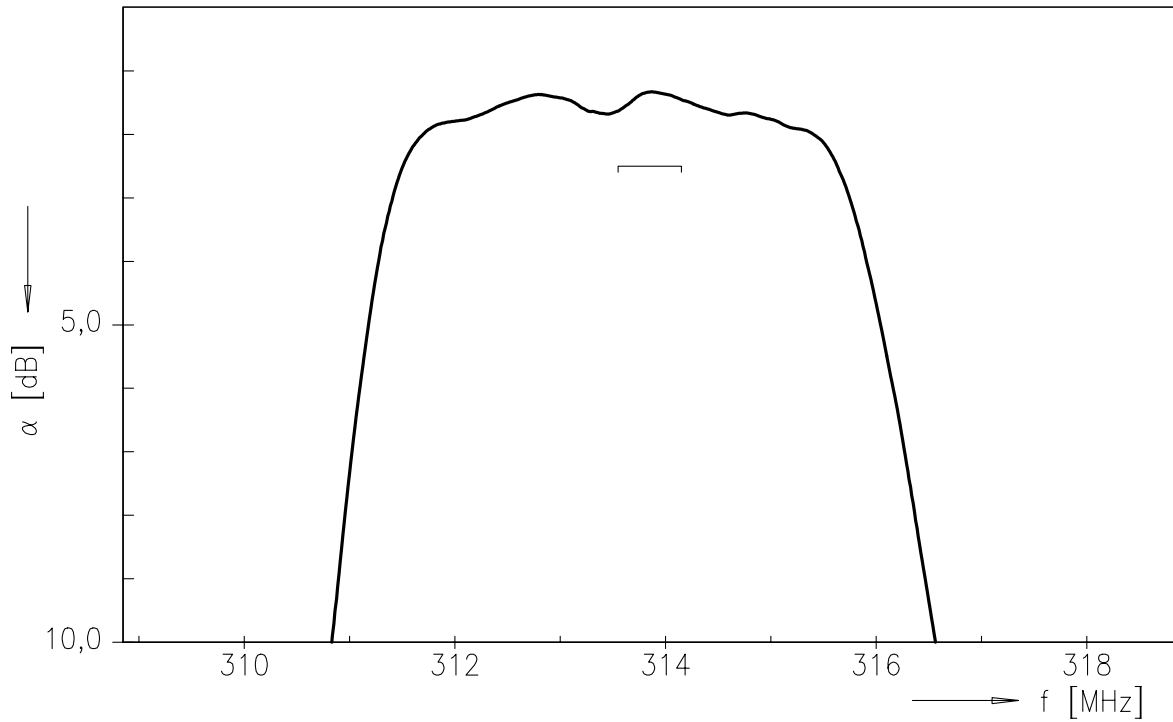
Maximum ratings

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

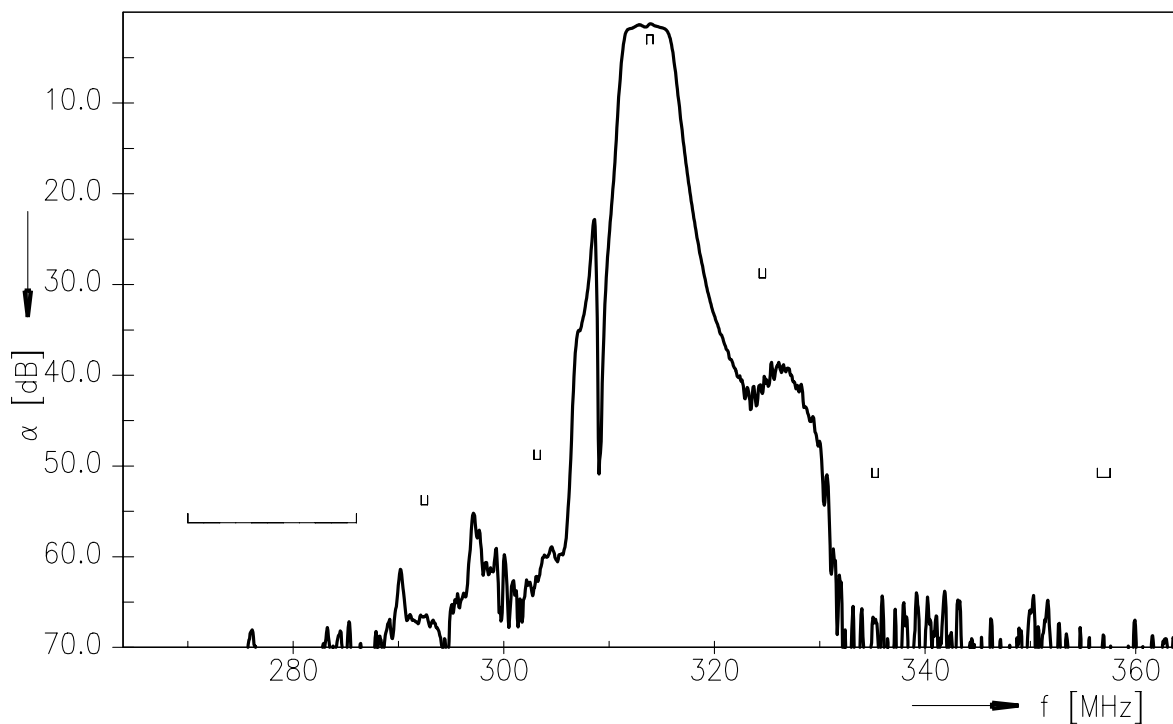
Data sheet



Transfer function



Transfer function (wideband)



References

Type	B3713
Ordering code	B39311B3713U410
Marking and package	C61157-A7-A67
Packaging	F61074-V8168-Z000
Date codes	L_1126
S-parameters	B3713_NB.s2p B3713_WB.s2p See file header for port/pin assignment table.
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."
Moldability	Before using in overmolding environment, please contact your EPCOS sales office.
Matching coils	See http://www.tdk.co.jp/tefe02/coil.htm#aname1 http://www.tdk.co.jp/etvcl/index.htm for a large variety of matching coils.

For further information please contact your local EPCOS sales office or visit our webpage at www.epcos.com .

Published by EPCOS AG
Surface Acoustic Wave Components Division
P.O. Box 80 17 09, 81617 Munich, GERMANY

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