



SAW Components

SAW RF filter

Short range device

| | |
|-----------------------|-------------------------|
| Series/type: | B3718 |
| Ordering code: | B39921B3718U410 |
| Date: | January 14, 2009 |
| Version: | 2.2 |



SAW Components

B3718

SAW RF filter

916.00 MHz

Data sheet



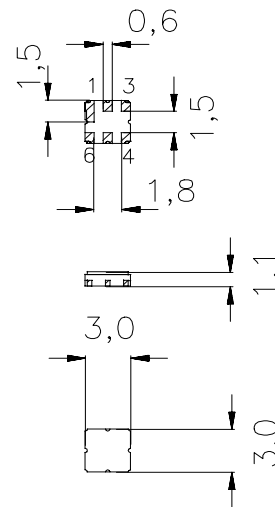
Application

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



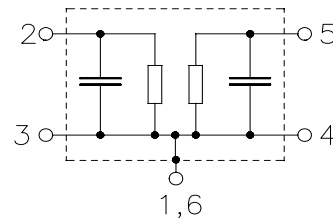
Features

- 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



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



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Characteristics

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

| | | min. | typ. | max. | |
|--------------------------------------|-----------------|------|--------|------|-----|
| Center frequency | f_C | — | 916.00 | — | MHz |
| Maximum insertion attenuation | α_{\max} | — | 2.4 | 3.0 | dB |
| 914.25 ... 917.75 MHz | | | | | |
| Amplitude ripple (p-p) | $\Delta\alpha$ | — | 0.5 | 1.2 | dB |
| 914.25 ... 917.75 MHz | | | | | |
| Attenuation | α | | | | dB |
| 10.00 ... 897.00 MHz | | 36 | 40 | — | |
| 897.00 ... 903.00 MHz | | 24 | 27 | — | |
| 930.00 ... 937.00 MHz | | 27 | 34 | — | |
| 937.00 ... 1200.00 MHz | | 42 | 46 | — | |



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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 | — | 916.00 | — | MHz |
| Maximum insertion attenuation | α_{\max} | — | 2.4 | 3.4 | dB |
| 914.25 ... 917.75 MHz | | | | | |
| Amplitude ripple (p-p) | $\Delta\alpha$ | — | 0.5 | 1.6 | dB |
| 914.25 ... 917.75 MHz | | | | | |
| Attenuation | α | | | | dB |
| 10.00 ... 897.00 MHz | | 36 | 40 | — | |
| 897.00 ... 903.00 MHz | | 24 | 27 | — | |
| 930.00 ... 937.00 MHz | | 26 | 34 | — | |
| 937.00 ... 1200.00 MHz | | 42 | 46 | — | |



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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 | 13 | dBm | source impedance 50 Ω |
| Source power 914.25 MHz to 917.75 MHz | P _S | 16 | dBm | duty cycle 1:10, -40 °C to +85 °C |
| Source power 914.25 MHz to 917.75 MHz | P _S | 20 | dBm | duty cycle 1:100, -40 °C to +85 °C |



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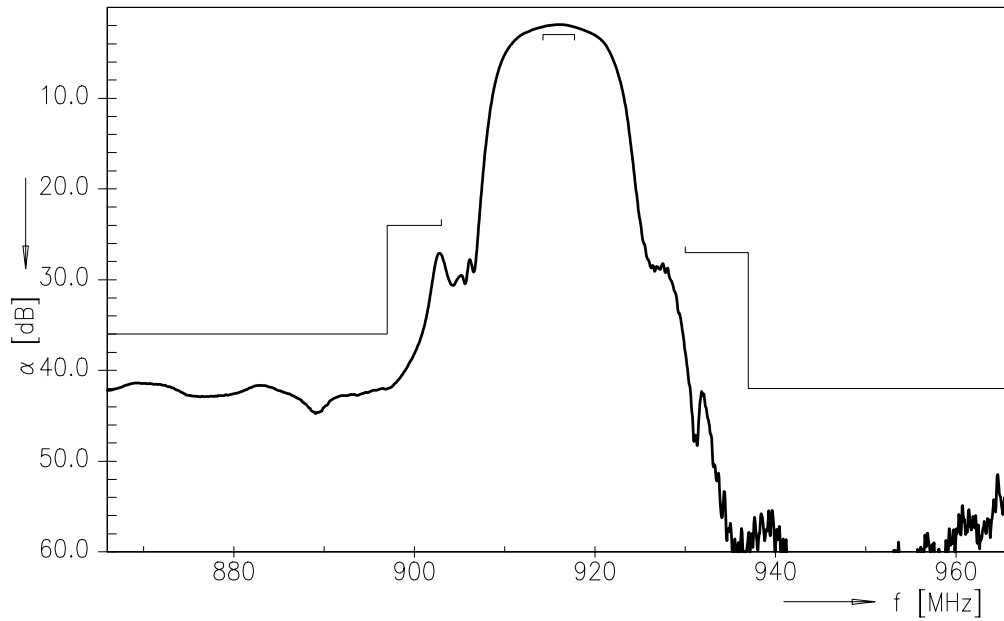
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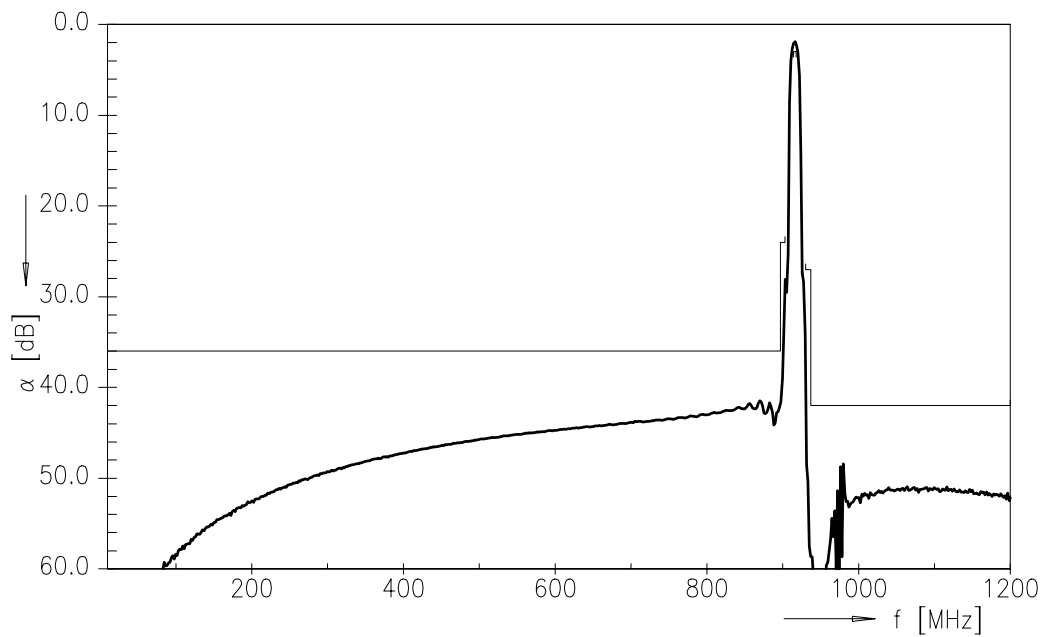
Data sheet



Transfer function



Transfer function (wideband)



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



| | |
|-----------------------|-------------------|
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References

| | |
|----------------------------|--|
| Type | B3718 |
| Ordering code | B39921B3718U410 |
| Marking and package | C61157-A7-A67 |
| Packaging | F61074-V8168-Z000 |
| Date codes | L_1126 |
| S-parameters | B3718_NB.s2p B3718_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." |

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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