

SAW Components

Data Sheet B9016





SAW ComponentsB9016Low-Loss Filter1575,42 MHz

Data Sheet

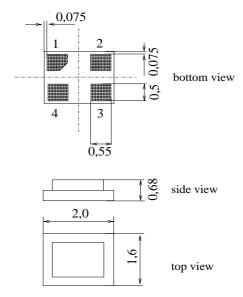
Features

- Low loss RF filter for GPS receivers
- Unbalanced to unbalanced operation
- Low amplitude ripple
- Package for Surface Mounted Technology (SMT)

Terminals

• Ni, gold-plated

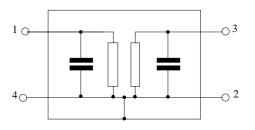
Chip Sized SAW Package DCS4F



Dimensions in mm, approx. weight 0,007g.

Pin configuration

| 1 | Input |
|-----|--------|
| 3 | Output |
| 2,4 | Ground |



| Туре | Ordering code | Marking and Package | Packing |
|-------|-------------------|---------------------|-------------------|
| | | according to | according to |
| B9016 | B39162-B9016-E610 | C61157-A7-A113 | F61074-V8152-Z000 |

Electrostatic Sensitive Device (ESD)

Maximum ratings

| Operable temperature range | Т | - 30/+ 85 | °C | |
|-------------------------------|----------------------|-----------|-----|---------------------------------------|
| Storage temperature range | T _{stg} | - 40/+ 85 | °C | |
| DC voltage | V _{DC} | 3 | V | |
| ESD voltage | V_{ESD}^{*} | 50* | V | machine model, 10 pulses |
| Input power max. | | | | |
| 1573,42 1577,42 MHz | $P_{\rm IN}$ | 3 | dBm | source and load impedance 50 Ω |
| 50,01460 and 1710 4000 MHz | P _{IN} | 13 | dBm | continuous wave signal |

2

* acc. to JESD22-A115A (Machine Model), 10 negative & 10 positive pulses



| SAW Components | | | | | | B9016 |
|--|-------------|----------------------------|------|---------|--------|-------|
| Low-Loss Filter | | | | | 1575,4 | 2 MHz |
| Data Sheet | | | | | | |
| Characteristics | | | | | | |
| Operating temperature range: Terminating source impedance: Terminating load impedance: | Zs | = -30. = 50 Ω = 50 Ω | | | | |
| | | | min. | typ. | max. | |
| Nominal frequency | | f _N | — | 1575,42 | — | MHz |
| Maximum insertion attenuatio | n | α_{max} | | | | |
| 1574,67MHz | 1576,17 MHz | | — | 1,4 | 2,0 | dB |
| Amplitude ripple in passband | (p-p) | Δα | | | | |
| 1574,67MHz | 1576,17 MHz | | _ | 0,05 | 0,3 | dB |
| Phase linearity | | | | | | |
| 1574,67MHz | 1576,17 MHz | | — | 0,05 | 0,3 | deg |
| Attenuation | | α | | | | |
| 0,1 MHz | 915,0 MHz | | 35 | 42 | — | dB |
| 915,0 MHz | 1400,0 MHz | | 30 | 42 | — | dB |
| 1648,0 MHz | 1698,0 MHz | | 36 | 39 | — | dB |
| 1698,0 MHz | 1850,0 MHz | | 28 | 46 | — | dB |
| 1850,0 MHz | 1980,0 MHz | | 35 | 46 | — | dB |
| 1980,0 MHz | 2245,0 MHz | | 25 | 36 | — | dB |
| 2245,0 MHz | 3555,0 MHz | | 25 | 50 | — | dB |
| 5275,0 MHz | 5535,0 MHz | | 5 | 45 | — | dB |
| VSWR | | | | | | |
| 1574,67MHz | 1576,17 MHz | | — | 1,3 | 1,8 | |

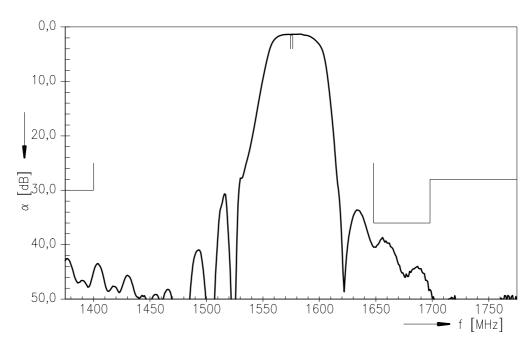
3 Dec 14, 2004



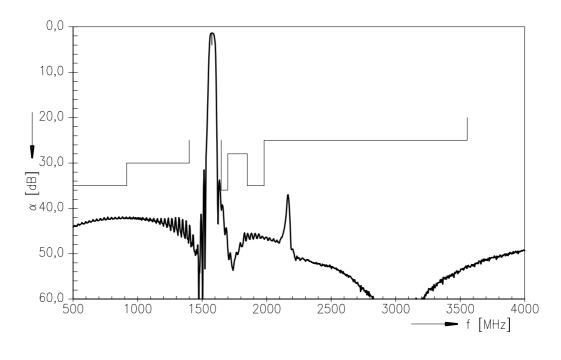
| SAW Components | B9016 |
|-----------------|-------------|
| Low-Loss Filter | 1575,42 MHz |
| | |

Data Sheet

Transfer function (pass band) :



Transfer function :



4



| SAW Components | B9016 |
|-----------------|-------------|
| Low-Loss Filter | 1575,42 MHz |

Data Sheet

Published by EPCOS AG SAW MC WT, P.O. Box 80 17 09, 81617 Munich, GERMANY TEL ++49 89 636 09, FAX ++49 89 636 2 26 89

© EPCOS AG 2004. Reproduction, publication and dissemination of this brochure and the information contained therein without EPCOS' prior express consent is prohibited.

Purchase orders are subject to the General Conditions for the Supply of Products and Services of the Electrical and Electronics Industry recommended by the ZVEI (German Electrical and Electronic Manufacturers' Association), unless otherwise agreed.

This brochure replaces the previous edition.

For questions on technology, prices and delivery please contact the Sales Offices of EPCOS AG or the international Representatives.

Due to technical requirements components may contain dangerous substances. For information on the type in question please also contact one of our Sales Offices.

