

SAW Components

SAW RF filter GPS

Series/type: B3521

Ordering code: B39162B3521U410

Date: February 18, 2008

Version: 2.0

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SAW Components B3521

SAW RF filter 1575.42 MHz

Data sheet



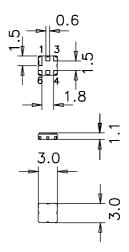
Application

- Low-loss RF filter for GPS application
- \blacksquare No matching network required for operation at 50 Ω



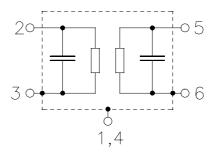
Features

- 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
- AEC-Q200 qualified component family
- Electrostactic Sensitive Device (ESD)



Pin configuration

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





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Characteristics

Temperature range for specification: $T = -40 \,^{\circ}\text{C}$ to +85 $^{\circ}\text{C}$

Terminating source impedance: $Z_S = 50 \Omega$ Terminating load impedance: $Z_L = 50 \Omega$

| | | min. | typ. @ 25 °C | max. | |
|---|-----------------------|----------------------------------|----------------------------------|-----------------------|----------------------------|
| Center frequency | f _C | _ | 1575.42 | _ | MHz |
| Maximum insertion attenuation 1574.42 1576.42 MHz | α_{max} | _ | 3.2 | 3.5 | dB |
| Amplitude ripple (p-p) 1574.42 1576.42 MHz | Δα | _ | 0.5 | 1.0 | MHz |
| Input VSWR | | _ | 1.9 | 2.3 | |
| 1574.42 1576.42 MHz Attenuation | α | _ | 1.9 | 2.3 | |
| 850.00 MHz 1500.00 MHz 1535.42 MHz 1615.42 MHz 1640.00 MHz 1700.00 MHz | | 45 40 35 25 45 50 | 65 43 42 33 48 52 | _ _ _ _ _ | dB dB dB dB dB |

Maximum ratings

| Operable temperature range | Т | -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 |



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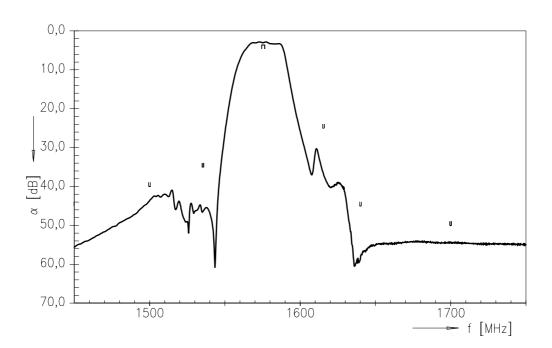
SAW RF filter

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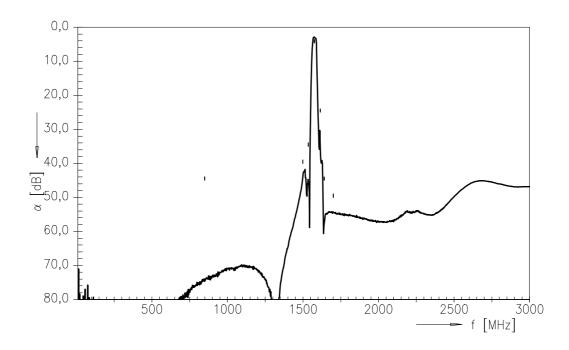
B3521

1575.42 MHz

Transfer function



Transfer function (wideband)

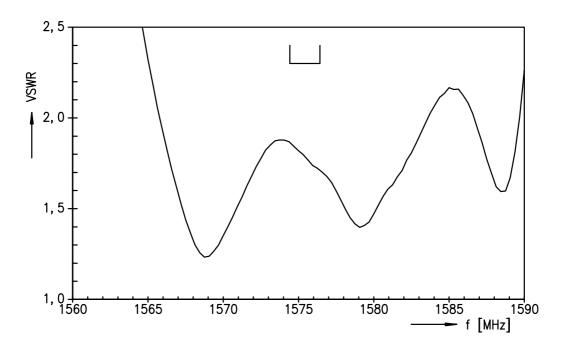




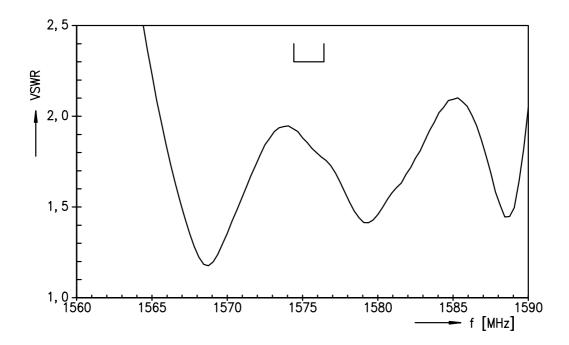
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Input VSWR



Output VSWR





| SAW Components | B3521 |
|----------------|-------------|
| SAW RF filter | 1575.42 MHz |
| | |

Data sheet



References

| Туре | B3521 |
|---------------------|---|
| Ordering code | B39162B3521U410 |
| Marking and package | C61157-A7-A67 |
| Packaging | F61074-V8168-Z000 |
| Date codes | L_1126 |
| S-parameters | B3521_NB.s2p B3521_WB.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." |

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

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