



SAW Components

SAW RF filter

Basestation

| | |
|-----------------------|------------------------|
| Series/type: | B5117 |
| Ordering code: | B39771B5117U410 |
| Date: | June 23, 2009 |
| Version: | 2.0 |



SAW Components

B5117

SAW RF filter

766.5 MHz

Data Sheet



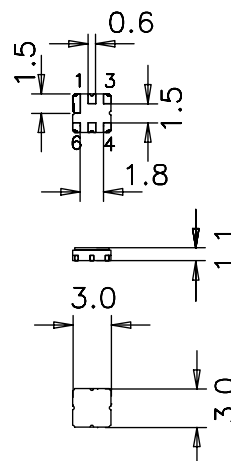
Application

- Low-loss RF filter for Basestation
- Usable band width 17 MHz



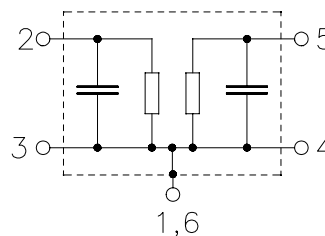
Features

- Package size 3.0 x3.0 x 1.10 mm³
- Package code DCC6C
- RoHS compatible
- Approximate weight 0.037 g
- Ceramic package for **Surface Mount Technology (SMT)**
- Ni, gold-plated terminals
- **Electrostatic Sensitive Device (ESD)**
- Filter surface passivated



Pin configuration

- 2 Input
- 5 Output
- 1, 3, 4, 6 To be grounded





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Characteristics

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|--------------------------------------|-----------------------|
| Temperature range for specification: | T = -25 °C to +85 °C |
| Terminating source impedance: | Z _S = 50 Ω |
| Terminating load impedance: | Z _L = 50 Ω |

| | | min. | typ. @ 25 °C | max. | |
|---|------------------|------|-----------------|------|-------|
| Nominal frequency | f _N | — | 766.5 | — | MHz |
| Maximum insertion attenuation | α _{max} | | | | |
| f _N ± 8.5 MHz | | — | 2.0 | 3.0 | dB |
| Amplitude ripple (p-p) | Δα | | | | |
| f _N ± 8.5 MHz | | — | 0.75 | 1.5 | dB |
| Return loss (input / output) | | | | | |
| f _N ± 8.5 MHz | | 9 | 11 | — | |
| Absolute attenuation | α | | | | |
| 788.0 ... 805.0 MHz | | 10 | 18 | — | dB |
| 806.0 ... 849.0 MHz | | 20 | 35 | — | dB |
| Temperature coefficient of frequency | TC _f | — | -36 | — | ppm/K |

Maximum ratings

| | | | | |
|----------------------------|------------------|------------------|-----|------------------------|
| Operable temperature range | T | -40/+85 | °C | |
| Storage temperature range | T _{stg} | -40/+85 | °C | |
| DC voltage | V _{DC} | 0 | V | |
| ESD voltage | V _{ESD} | 50 ¹⁾ | V | machine model, 1 pulse |
| Input power | P _{IN} | 10 | dBm | |

¹⁾ acc. to JESD22-A115A (machine model), 1 negative & 1 positive pulse.



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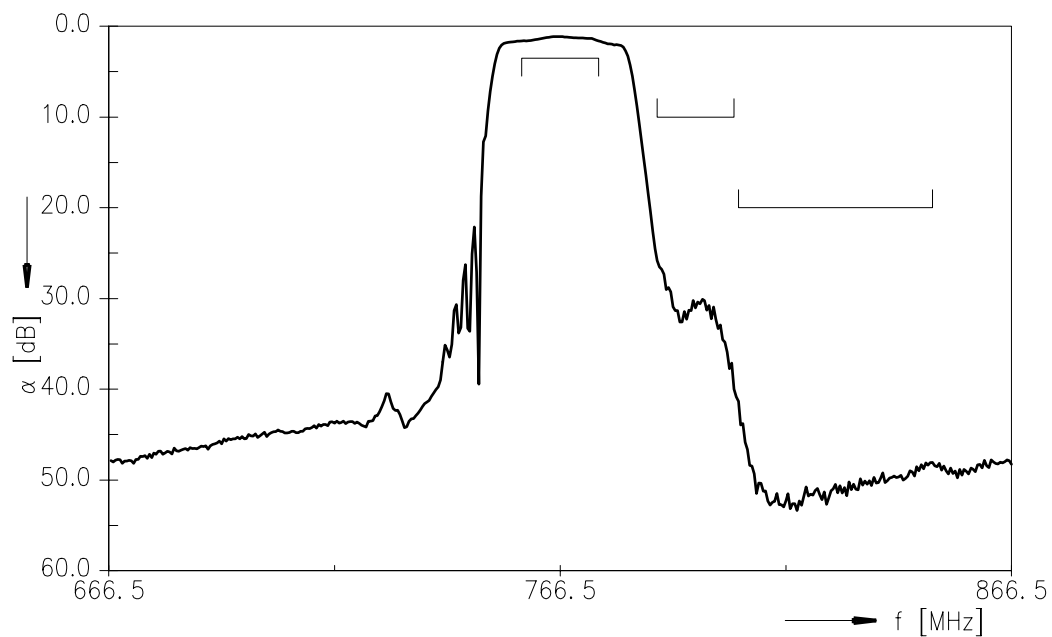
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Transfer function





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|-----------------------|------------------|
| SAW Components | B5117 |
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| Data Sheet | SMD |

References

| | |
|----------------------------|--|
| Type | B5117 |
| Ordering code | B39771B5117U410 |
| Marking and package | C61157-A7-A67 |
| Packaging | F61074-V8168-Z000 |
| Date codes | L_1126 |
| S-parameters | LI50A_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." |

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

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