



# SAW Components

Data Sheet B4182





**SAW Components**

**B4182**

**Low-Loss Filter for Mobile Communication**

**1882,5 MHz**

**Data Sheet**



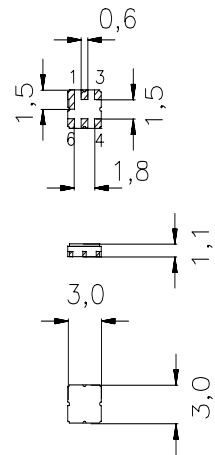
Ceramic package **DCC6C**

**Features**

- Low-loss RF filter for Multicarrier Basestation (CDMA) , receive path
- Usable passband: 65 MHz
- No matching network required for operation at 50Ω
- Ceramic package for **Surface Mounted Technology (SMT)**
- Hermetically sealed ceramic package
- RoHS compliant

**Terminals**

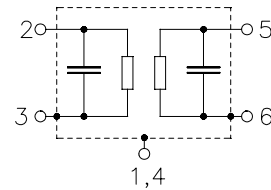
- Ni, gold-plated



Dimensions in mm, approx. weight 0,037 g

**Pin configuration**

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



| Type  | Ordering code     | Marking and Package according to | Packing according to |
|-------|-------------------|----------------------------------|----------------------|
| B4182 | B39182-B4182-U410 | C61157-A7-A67                    | F61074-V8168-Z000    |

**Electrostatic Sensitive Device (ESD)**

**Maximum ratings**

|                            |             |             |     |  |
|----------------------------|-------------|-------------|-----|--|
| Operable temperature range | $T$         | - 40 / + 85 | °C  | Machine Model, 10 pulses<br>source and load impedance 50 Ω<br>continuous wave, 85 °C<br>continuous wave, 55 °C |
| Storage temperature range  | $T_{stg}$   | - 40 / + 85 | °C  |  |
| ESD voltage                | $V_{ESD}^*$ | 50*         | V   |  |
| Input power max.           |             |             |     |  |
| 1930,0 ... 1990,0 MHz      | $P_{IN}$    | 12          | dBm |  |
|                            | $P_{IN}$    | 15          | dBm |  |

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



**Characteristics**

Operating temperature range:  $T = +25 \pm 2 \text{ }^\circ\text{C}$   
 Terminating source impedance:  $Z_S = 50 \text{ } \Omega$   
 Terminating load impedance:  $Z_L = 50 \text{ } \Omega$

|                                      |                       |                   |     | min. | typ.   | max. |     |
|--------------------------------------|-----------------------|-------------------|-----|------|--------|------|-----|
| <b>Center frequency</b>              | $f_c$                 |                   |     |      | 1882,5 |      | MHz |
| <b>Maximum insertion attenuation</b> | $\alpha_{\max}$       | 1850,0 ... 1915,0 | MHz | —    | 2,5    | 3,2  | dB  |
| <b>Amplitude ripple (p-p)</b>        | $\Delta\alpha$        | 1850,0 ... 1915,0 | MHz | —    | 0,8    | 1,4  | dB  |
| <b>Return loss</b>                   |                       | 1850,0 ... 1915,0 | MHz | 9,0  | 10,0   | —    | dB  |
| <b>Attenuation</b>                   | $\alpha_{\text{abs}}$ | 800,0 ... 1400,0  | MHz | 24,0 | 28,0   | —    | dB  |
|                                      |                       | 1400,0 ... 1745,0 | MHz | 25,0 | 28,0   | —    | dB  |
|                                      |                       | 1930,0 ... 1940,0 | MHz | 5,0  | 10,0   | —    | dB  |
|                                      |                       | 1940,0 ... 3000,0 | MHz | 20,0 | 23,0   | —    | dB  |



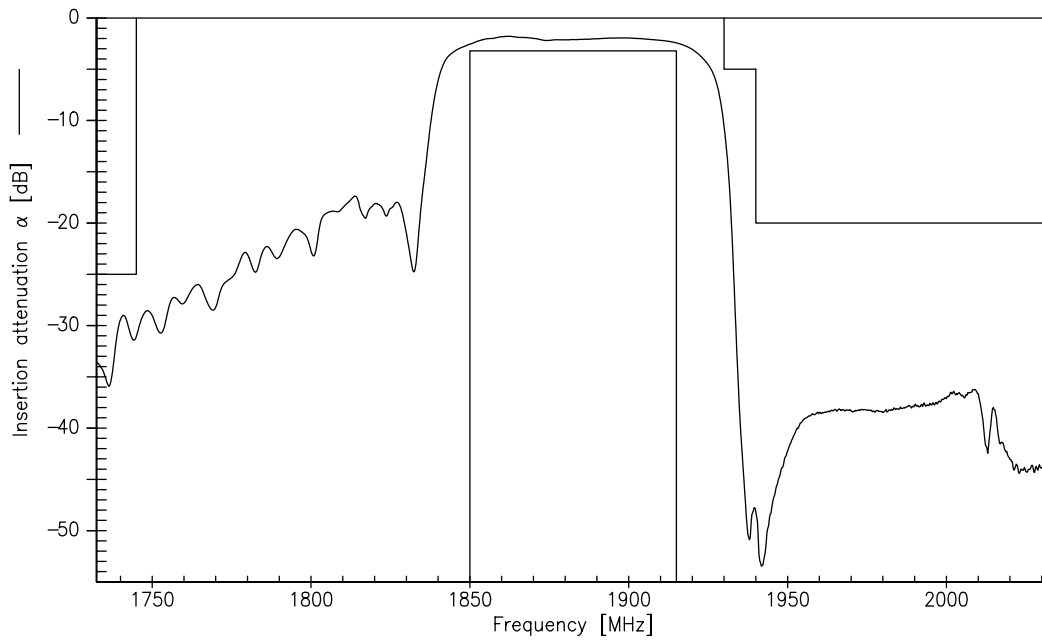
**Characteristics**

Operating temperature range:  $T = 0$  to  $+85^{\circ}\text{C}$   
 Terminating source impedance:  $Z_S = 50\ \Omega$   
 Terminating load impedance:  $Z_L = 50\ \Omega$

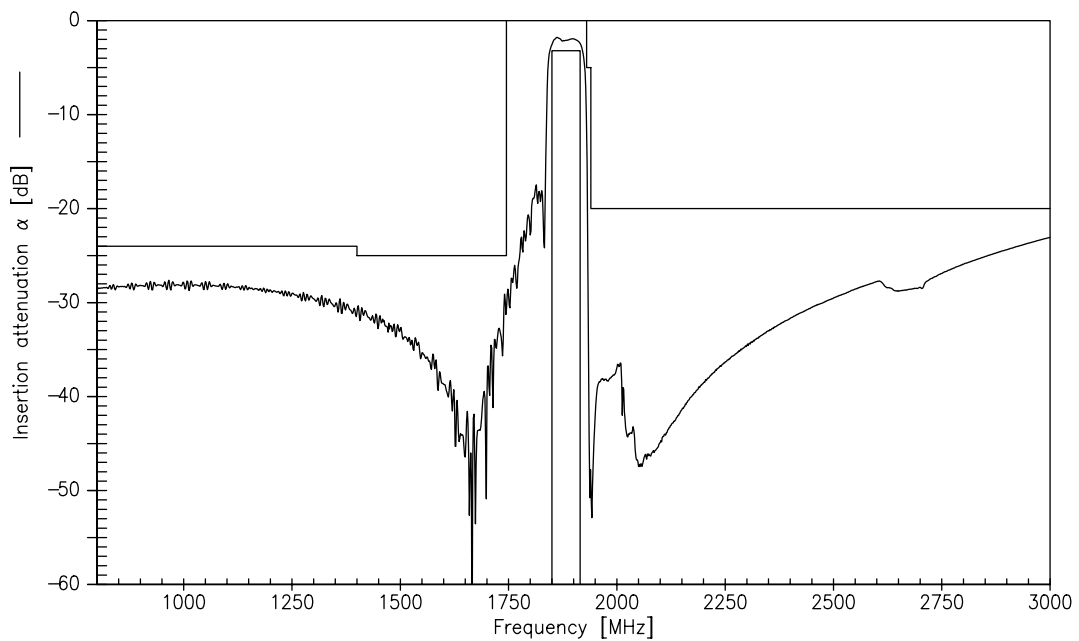
|                                      |                   |       |                       | min. | typ.   | max. |     |
|--------------------------------------|-------------------|-------|-----------------------|------|--------|------|-----|
| <b>Center frequency</b>              |                   | $f_c$ |                       |      | 1882,5 |      | MHz |
| <b>Maximum insertion attenuation</b> | 1850,0 ... 1915,0 | MHz   | $\alpha_{\max}$       | —    | 2,9    | 3,5  | dB  |
| <b>Amplitude ripple (p-p)</b>        | 1850,0 ... 1915,0 | MHz   | $\Delta\alpha$        | —    | 1,1    | 1,7  | dB  |
| <b>Return loss</b>                   | 1850,0 ... 1915,0 | MHz   |                       | 9,0  | 10,0   | —    | dB  |
| <b>Attenuation</b>                   | 800,0 ... 1400,0  | MHz   | $\alpha_{\text{abs}}$ | 24,0 | 28,0   | —    |     |
|                                      | 1400,0 ... 1746,0 | MHz   |                       | 25,0 | 28,0   | —    | dB  |
|                                      | 1930,0 ... 1940,0 | MHz   |                       | 5,0  | 7,0    | —    | dB  |
|                                      | 1940,0 ... 3000,0 | MHz   |                       | 20,0 | 23,0   | —    | dB  |



Transfer function (Narrowband measurement)



Transfer function (Wideband measurement)





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