



# SAW Components

Data Sheet B3682





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Low-Loss Filter

427,5 MHz

Data Sheet

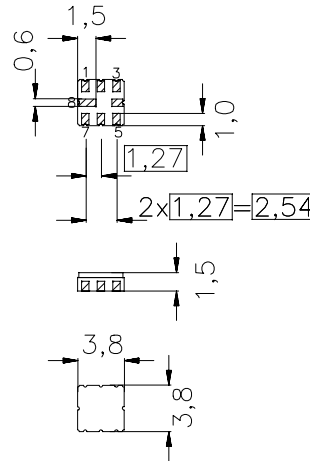
Ceramic package QCC8B

**Features**

- Low-loss filter (RX) for Trunked Radio
- Usable bandwidth 5 MHz
- No matching required for operation at 50 Ω
- Package for Surface Mounted Technology (SMT)
- Hermetically sealed ceramic package

**Terminals**

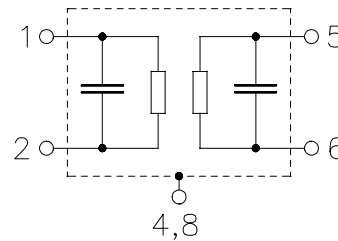
- Gold-plated



typ. Dimensions in mm, approx. weight 0,07 g

**Pin configuration**

- 1 Input
- 2 Input ground
- 5 Output
- 6 Output ground
- 3, 7 Ground
- 4, 8 Case ground



| Type  | Ordering code     | Marking and Package according to | Packing according to |
|-------|-------------------|----------------------------------|----------------------|
| B3682 | B39431-B3682-Z810 | C61157-A7-A46                    | F61074-V8037-Z000    |

Electrostatic Sensitive Device (ESD)

**Maximum ratings**

|                            |           |           |     |                       |
|----------------------------|-----------|-----------|-----|-----------------------|
| Operable temperature range | $T_A$     | -30 / +75 | °C  |                       |
| Storage temperature range  | $T_{stg}$ | -40 / +85 | °C  |                       |
| DC voltage                 | $V_{DC}$  | 0         | V   |                       |
| Source power               | $P_s$     | 10        | dBm | source impedance 50 Ω |



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**Characteristics**

Operating temperature range:  $T_A = +15 \dots +35 \text{ }^\circ\text{C}$   
 Terminating source impedance:  $Z_S = 50 \text{ } \Omega$   
 Terminating load impedance:  $Z_L = 50 \text{ } \Omega$

|  |                       | <b>min.</b> | <b>typ.</b> | <b>max.</b> |       |
|--|-----------------------|-------------|-------------|-------------|-------|
| <b>Nominal frequency</b>   | $f_N$                 | —           | 427,5       | —           | MHz   |
| <b>Maximum insertion attenuation</b><br>425,0 MHz ... 430,0 MHz  | $\alpha_{\max}$       | —           | 3,0         | 3,5         | dB    |
| <b>Amplitude ripple (p-p)</b><br>425,0 MHz ... 430,0 MHz         | $\Delta\alpha$        | —           | 0,6         | 1,2         | dB    |
| <b>Return loss (Input and Output)</b><br>425,0 MHz ... 430,0 MHz |                       | 11,0        | 13,5        | —           | dB    |
| <b>VSWR</b><br>425,0 MHz ... 430,0 MHz                           |                       | —           | 1,5:1       | 2,0:1       |       |
| <b>Absolute attenuation</b>                                      | $\alpha_{\text{abs}}$ |             |             |             |       |
| 0,3 MHz ... 340,0 MHz  |                       | 40          | 60          | —           | dB    |
| 340,0 MHz ... 415,0 MHz  |                       | 25          | 45          | —           | dB    |
| 415,0 MHz ... 420,0 MHz  |                       | 25          | 33          | —           | dB    |
| 447,0 MHz ... 515,0 MHz  |                       | 20          | 45          | —           | dB    |
| 515,0 MHz ... 1105,0 MHz   |                       | 40          | 45          | —           | dB    |
| 1105,0 MHz ... 1800,0 MHz  |                       | 20          | 25          | —           | dB    |
| <b>Temperature coefficient of frequency</b>                      | $TC_f$                | —           | -36         | —           | ppm/K |



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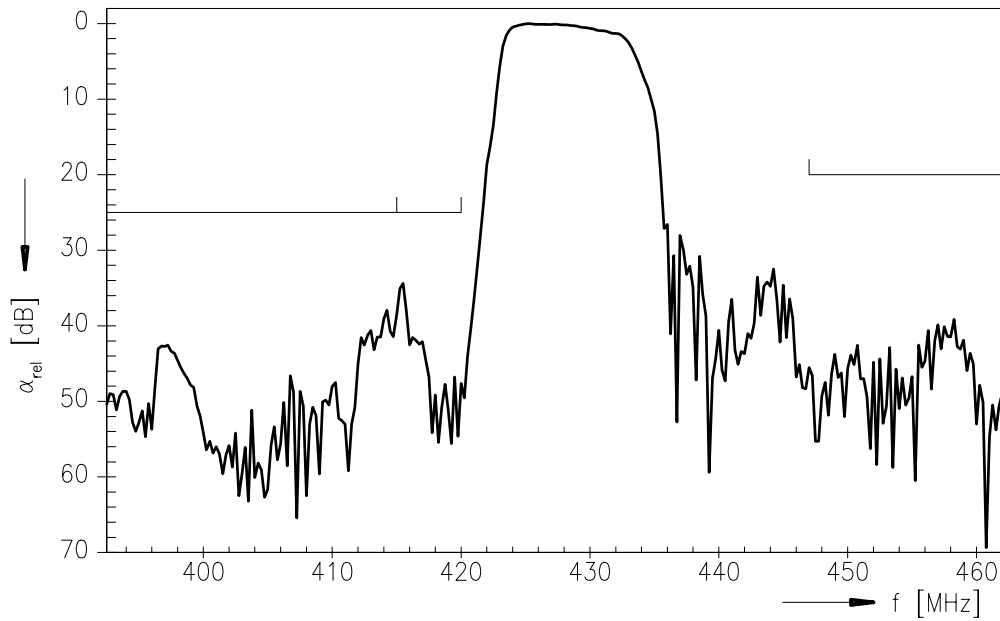
Operating temperature range:  $T_A = -30 \dots +75 \text{ }^\circ\text{C}$   
 Terminating source impedance:  $Z_S = 50 \text{ } \Omega$   
 Terminating load impedance:  $Z_L = 50 \text{ } \Omega$

|  |                       | min. | typ.  | max.  |       |
|--|-----------------------|------|-------|-------|-------|
| <b>Nominal frequency</b>   | $f_N$                 | —    | 427,5 | —     | MHz   |
| <b>Maximum insertion attenuation</b><br>425,0 MHz ... 430,0 MHz  | $\alpha_{\max}$       | —    | 3,0   | 3,5   | dB    |
| <b>Amplitude ripple (p-p)</b><br>425,0 MHz ... 430,0 MHz         | $\Delta\alpha$        | —    | 0,9   | 2,0   | dB    |
| <b>Return loss (Input and Output)</b><br>425,0 MHz ... 430,0 MHz |                       | 11,0 | 13,5  | —     | dB    |
| <b>VSWR</b><br>425,0 MHz ... 430,0 MHz                           |                       | —    | 1,5:1 | 2,0:1 |       |
| <b>Absolute attenuation</b>                                      | $\alpha_{\text{abs}}$ |      |       |       |       |
| 0,3 MHz ... 340,0 MHz  |                       | 40   | 60    | —     | dB    |
| 340,0 MHz ... 415,0 MHz  |                       | 25   | 45    | —     | dB    |
| 415,0 MHz ... 420,0 MHz  |                       | 25   | 33    | —     | dB    |
| 447,0 MHz ... 515,0 MHz  |                       | 20   | 45    | —     | dB    |
| 515,0 MHz ... 1105,0 MHz   |                       | 40   | 45    | —     | dB    |
| 1105,0 MHz ... 1800,0 MHz  |                       | 20   | 25    | —     | dB    |
| <b>Temperature coefficient of frequency</b>                      | $TC_f$                | —    | - 36  | —     | ppm/K |

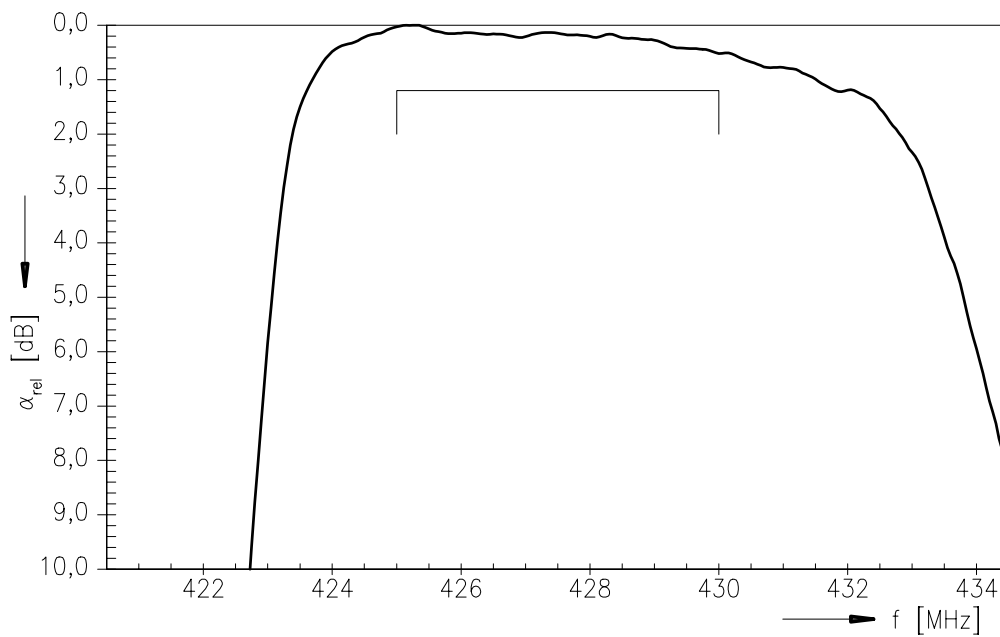


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Transfer function



Transfer function (pass band; +15 °C ... +35 °C)





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