EPCOS

# *SAW Components*

*Data Sheet B3682*

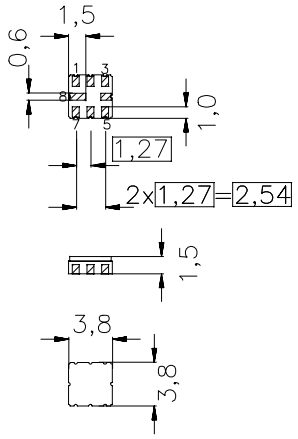
**Ceramic package QCC8B**

### 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

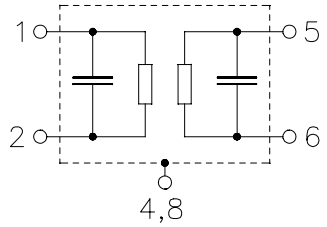
- Gold-plated




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 |

**E**lectrostatic **S**ensitive **D**evice (**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 |

Data Sheet

## Characteristics

Operating temperature range: $T_A$ = +15 ... +35 °C
Terminating source impedance: $Z_S$ = 50 Ω
Terminating load impedance: $Z_L$ = 50 Ω

| | | min. | typ. | max. | |
|---|---|---|---|---|---|
| **Nominal frequency** | $f_N$ | — | 427,5 | — | MHz |
| **Maximum insertion attenuation** | $\alpha_{max}$ | | | | |
| 425,0 MHz ... 430,0 MHz | | — | 3,0 | 3,5 | dB |
| **Amplitude ripple** (p-p) | $\Delta\alpha$ | | | | |
| 425,0 MHz ... 430,0 MHz | | — | 0,6 | 1,2 | dB |
| **Return loss (Input and Output)** | | | | | |
| 425,0 MHz ... 430,0 MHz | | 11,0 | 13,5 | — | dB |
| **VSWR** | | | | | |
| 425,0 MHz ... 430,0 MHz | | — | 1,5:1 | 2,0:1 | |
| **Absolute attenuation** | $\alpha_{abs}$ | | | | |
| 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 |
| **Temperature coefficient of frequency** | $TC_f$ | — | – 36 | — | ppm/K |

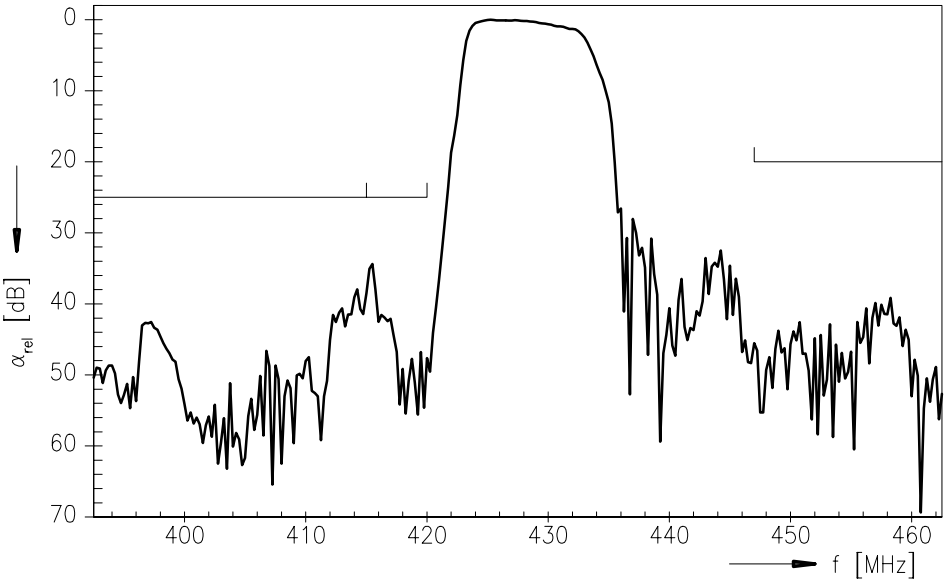
Data Sheet

## Characteristics

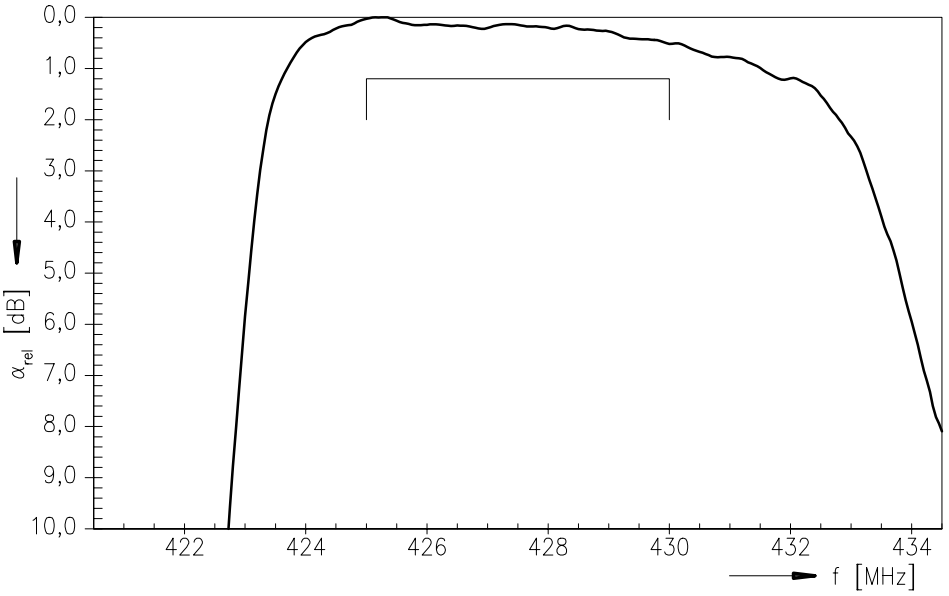
Operating temperature range: $T_A$ = -30 ... +75 °C
Terminating source impedance: $Z_S$ = 50 Ω
Terminating load impedance: $Z_L$ = 50 Ω

| | | min. | typ. | max. | |
|---|---|---|---|---|---|
| **Nominal frequency** | $f_N$ | — | 427,5 | — | MHz |
| **Maximum insertion attenuation** | $\alpha_{max}$ | | | | |
| 425,0 MHz ... 430,0 MHz | | — | 3,0 | 3,5 | dB |
| **Amplitude ripple** (p-p) | $\Delta\alpha$ | | | | |
| 425,0 MHz ... 430,0 MHz | | — | 0,9 | 2,0 | dB |
| **Return loss (Input and Output)** | | | | | |
| 425,0 MHz ... 430,0 MHz | | 11,0 | 13,5 | — | dB |
| **VSWR** | | | | | |
| 425,0 MHz ... 430,0 MHz | | — | 1,5:1 | 2,0:1 | |
| **Absolute attenuation** | $\alpha_{abs}$ | | | | |
| 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 |
| **Temperature coefficient of frequency** | $TC_f$ | — | – 36 | — | ppm/K |

**Transfer function**




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



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