

# SAW Components

Data Sheet B3675





SAW Components B3675
Low-Loss Filter 415,0 MHz

**Data Sheet** 

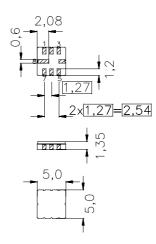
## Ceramic package QCC8C

#### **Features**

- Low-loss filter (TX) for TETRA
- Usable bandwidth 10 MHz
- No matching required for operation at 50  $\Omega$
- Package for Surface Mounted Technology (SMT)
- Hermetically sealed ceramic package

#### **Terminals**

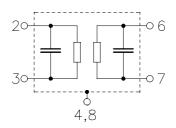
Gold-plated



typ. Dimensions in mm, approx. weight 0,10 g

## Pin configuration

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



| Туре  | Ordering code     | Marking and Package according to | Packing according to |
|-------|-------------------|----------------------------------|----------------------|
| B3675 | B39421-B3675-U310 | C61157-A7-A56                    | F61074-V8070-Z000    |

Electrostatic Sensitive Device (ESD)

## **Maximum ratings**

| Operable temperature range | $T_{A}$       | -40 / +80 | °C  |                              |
|----------------------------|---------------|-----------|-----|------------------------------|
| Storage temperature range  | $T_{\rm stg}$ | -40 / +85 | °C  |                              |
| DC voltage                 | $V_{\rm DC}$  | 0         | V   |                              |
| Source power               | $P_{s}$       | 15        | dBm | source impedance 50 $\Omega$ |



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Characteristics

Operating temperature range:

 $T_{A} = -10 \dots +60 \,^{\circ}\text{C}$   $Z_{S} = 50 \,\Omega$   $Z_{L} = 50 \,\Omega$ Terminating source impedance: Terminating load impedance:

|                                      |                        | min. | typ.        | max.  |       |
|--------------------------------------|------------------------|------|-------------|-------|-------|
| Nominal frequency                    | $f_{N}$                | _    | 415,0       | _     | MHz   |
| Maximum insertion attenuation        | $\alpha_{\sf max}$     |      |             |       |       |
| 410,0 MHz 420,0 MHz                  |                        | _    | 2,5         | 4,0   | dB    |
| Amplitude ripple (p-p)               | Δα                     |      |             |       |       |
| 410,0 MHz 420,0 MHz                  |                        | _    | 0,45        | 1,0   | dB    |
| VSWR                                 |                        |      |             |       |       |
| 410,0 MHz 420,0 MHz                  |                        | _    | 1,4:1       | 2,0:1 |       |
| Absolute attenuation                 | $lpha_{\sf abs}$       |      |             |       |       |
| 0,3 MHz 330,0 MHz                    |                        | 40   | 60          | _     | dB    |
| 500,0 MHz 840,0 MHz                  |                        | 40   | 50          |       | dB    |
| 840,0 MHz 1260,0 MHz                 |                        | 20   | 35          | _     | dB    |
| Temperature coefficient of frequency | <i>TC</i> <sub>f</sub> |      | <b>- 70</b> | _     | ppm/K |



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Characteristics

Operating temperature range:

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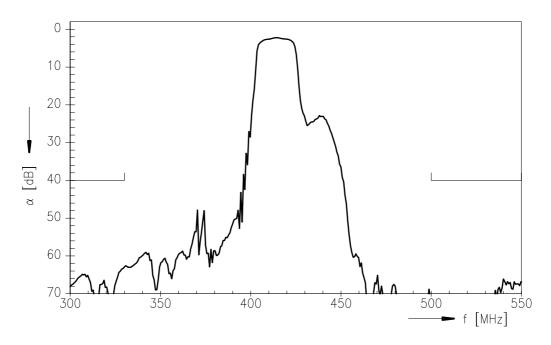
|                                      |                 | min. | typ.  | max.  |       |
|--------------------------------------|-----------------|------|-------|-------|-------|
| Nominal frequency                    | f <sub>N</sub>  | _    | 415,0 | _     | MHz   |
| Maximum insertion attenuation        | $\alpha_{max}$  |      |       |       |       |
| 410,0 MHz 420,0 MHz                  |                 | _    | 3,0   | 5,0   | dB    |
| Amplitude ripple (p-p)               | Δα              |      |       |       |       |
| 410,0 MHz 420,0 MHz                  |                 | _    | 0,6   | 2,0   | dB    |
| VSWR                                 |                 |      |       |       |       |
| 410,0 MHz 420,0 MHz                  |                 | _    | 1,4:1 | 2,0:1 |       |
| Absolute attenuation                 | $\alpha_{abs}$  |      |       |       |       |
| 0,3 MHz 330,0 MHz                    |                 | 40   | 60    | _     | dB    |
| 500,0 MHz 840,0 MHz                  |                 | 40   | 50    | _     | dB    |
| 840,0 MHz 1260,0 MHz                 |                 | 20   | 35    | _     | dB    |
| Temperature coefficient of frequency | TC <sub>f</sub> |      | - 70  |       | ppm/K |



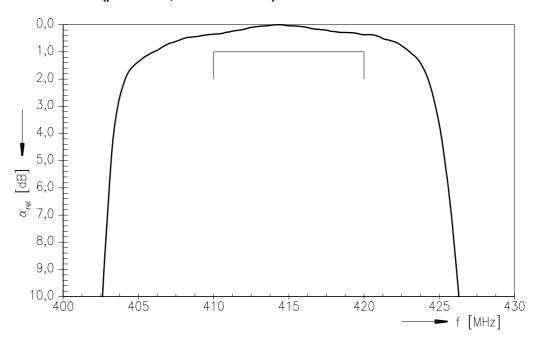
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## **Transfer function**



# Transfer function (pass band; -10 °C ... +60 °C)





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