EPCOS

# *SAW Components*

*Data Sheet B3858*

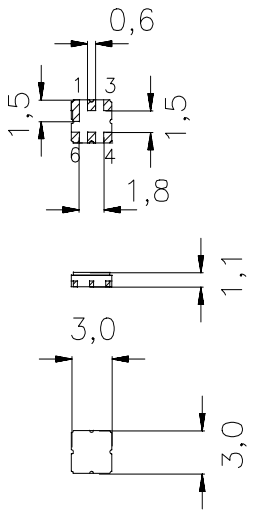
**Ceramic package DCC6C**

### Features

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

### Terminals

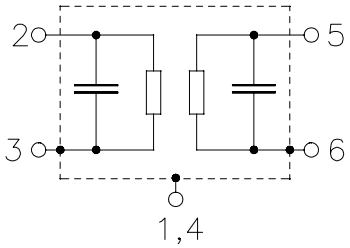
- Gold-plated




typ. Dimensions in mm, approx. weight 0,037 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 |
|---|---|---|---|
| B3858 | B39921-B3858-U410 | C61157-A7-A67 | F61074-V8088-Z000 |

**E**lectrostatic **S**ensitive **D**evice (**ESD**)

### Maximum ratings

| | | | | |
|---|---|---|---|---|
| Operable temperature range | $T_A$ | -35 / +85 | ˚C | |
| Storage temperature range | $T_{stg}$ | -40 / +85 | ˚C | |
| DC voltage | $V_{DC}$ | 0 | V | |
| Source power (cw) | $P_s$ | 6 | dBm | source impedance 50 Ω |

## Characteristics

Operating temperature range: $T_A$ = 25 ± 10 °C
Terminating source impedance: $Z_S$ = 50 Ω
Terminating load impedance: $Z_L$ = 50 Ω

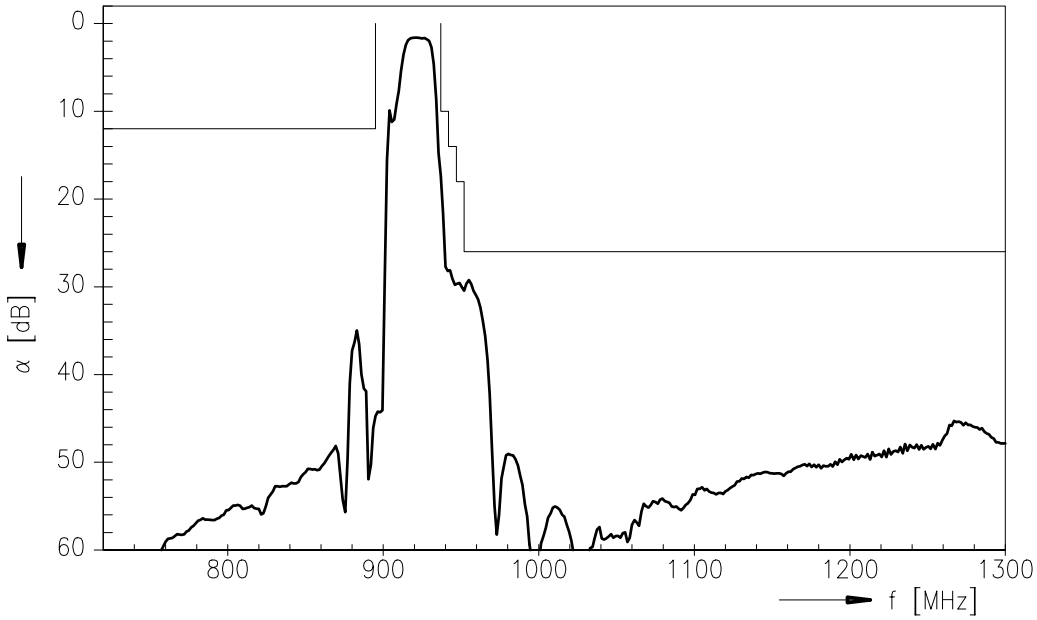
| | | min. | typ. | max. | |
|---|---|---|---|---|---|
| **Nominal frequency** | $f_N$ | — | 924,5 | — | MHz |
| **Maximum insertion attenuation** | $\alpha_{max}$ | | | | |
| 922,0 MHz ... 927,0 MHz | | — | 1,8 | 2,8 | dB |
| **Amplitude ripple** (p-p) | $\Delta\alpha$ | | | | |
| 922,0 MHz ... 927,0 MHz | | — | 0,3 | 1,0 | dB |
| **Group delay ripple** (p-p) | $\Delta\tau$ | | | | |
| 922,0 MHz ... 927,0 MHz | | — | 15 | 40 | ns |
| **Return loss (Input and Output)** | | | | | |
| 922,0 MHz ... 927,0 MHz | | 11,0 | 17,0 | — | dB |
| **Absolute attenuation** | $\alpha_{abs}$ | | | | |
| 0,1 MHz ... 895,0 MHz | | 12 | 34 | — | dB |
| 937,0 MHz ... 942,0 MHz | | 10 | 16 | — | dB |
| 942,0 MHz ... 947,0 MHz | | 14 | 27 | — | dB |
| 947,0 MHz ... 952,0 MHz | | 18 | 29 | — | dB |
| 952,0 MHz ... 2000,0 MHz | | 26 | 29 | — | dB |
| 2000,0 MHz ... 4000,0 MHz | | 15 | 26 | — | dB |
| **Temperature coefficient of frequency** | $TC_f$ | — | – 36 | — | ppm/K |

## Characteristics

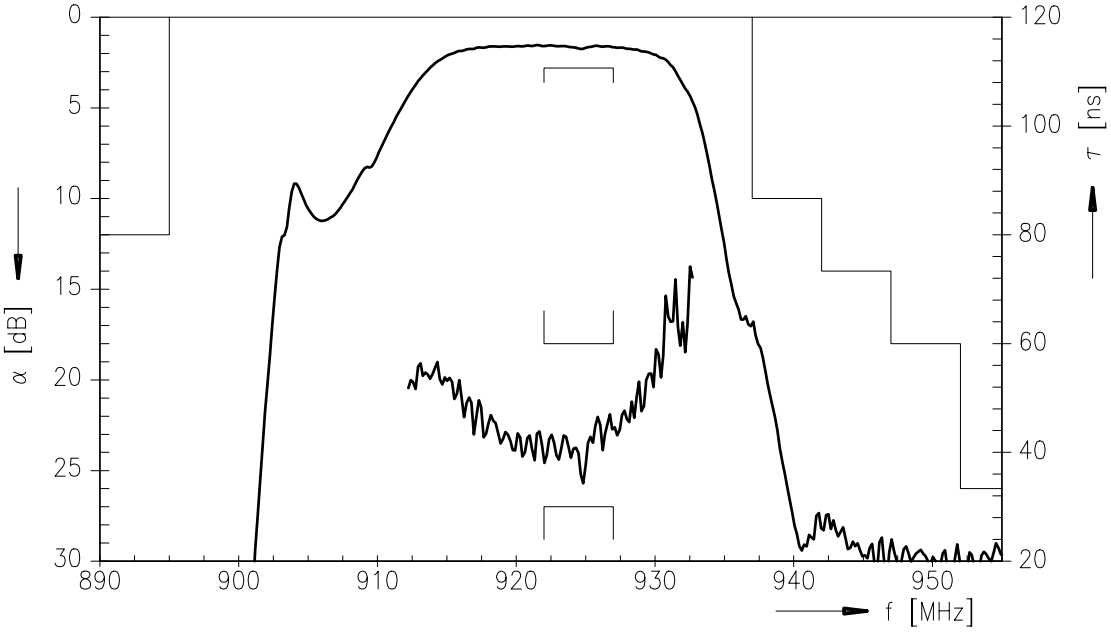
Operating temperature range: $T_A$ = -30 ... +75 ˚C
Terminating source impedance: $Z_S$ = 50 Ω
Terminating load impedance: $Z_L$ = 50 Ω

| | | min. | typ. | max. | |
|---|---|---|---|---|---|
| **Nominal frequency** | $f_N$ | — | 924,5 | — | MHz |
| **Maximum insertion attenuation** | $\alpha_{max}$ | | | | |
| 922,0 MHz ... 927,0 MHz | | — | 2,0 | 3,4 | dB |
| **Amplitude ripple** (p-p) | $\Delta\alpha$ | | | | |
| 922,0 MHz ... 927,0 MHz | | — | 0,3 | 1,3 | dB |
| **Group delay ripple** (p-p) | $\Delta\tau$ | | | | |
| 922,0 MHz ... 927,0 MHz | | — | 20 | 40 | ns |
| **Return loss (Input and Output)** | | | | | |
| 922,0 MHz ... 927,0 MHz | | 11,0 | 17,0 | — | dB |
| **Absolute attenuation** | $\alpha_{abs}$ | | | | |
| 0,1 MHz ... 895,0 MHz | | 10 | 34 | — | dB |
| 937,0 MHz ... 942,0 MHz | | 8 | 14 | — | dB |
| 942,0 MHz ... 947,0 MHz | | 12 | 27 | — | dB |
| 947,0 MHz ... 952,0 MHz | | 15 | 29 | — | dB |
| 952,0 MHz ... 2000,0 MHz | | 26 | 29 | — | dB |
| 2000,0 MHz ... 4000,0 MHz | | 15 | 26 | — | dB |
| **Temperature coefficient of frequency** | $TC_f$ | — | – 36 | — | ppm/K |

**Transfer function**




**Transfer function (pass band, 25 ± 10 ˚C)**



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