Siemens Matsushita Components

# SAW Components
# Low Loss Filter for Mobile Communication

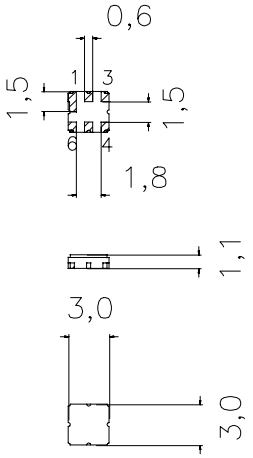
**B4122**
**836,5 MHz**

**Data Sheet**

Ceramic package **DCC6C**

## Features

- Low-loss RF filter for AMPS mobile telephone system, transmit path
- Low amplitude ripple
- Usable passband 25 MHz
- Ceramic package for **S**urface **M**ounted **T**echnology (**SMT**)



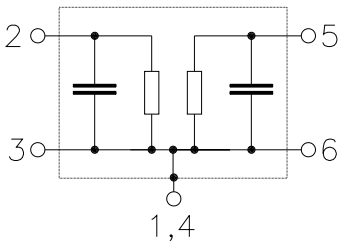

## Terminals

- Ni, gold-plated

Dimensions in mm, approx. weight 0,04 g

## Pin configuration

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




| Type | Ordering code | Marking and Package according to | Packing according to |
|---|---|---|---|
| B4122 | B39841-B4122-U410 | C61157-A7-A67 | F61074-V8088-Z000 |

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

## Maximum ratings

| | | | | |
|---|---|---|---|---|
| Operable temperature range | $T$ | – 30 / + 85 | ˚C | |
| Storage temperature range | $T_{stg}$ | – 40 / + 85 | ˚C | |
| DC voltage | $V_{DC}$ | 3 | V | |
| Source power | $P_s$ | 0 | dBm | source impedance 50 Ω |

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## Characteristics

Operating temperature range: $T$ = -30 to +85 °C
Terminating source impedance: $Z_S$ = 50 Ω
Terminating load impedance: $Z_L$ = 50 Ω

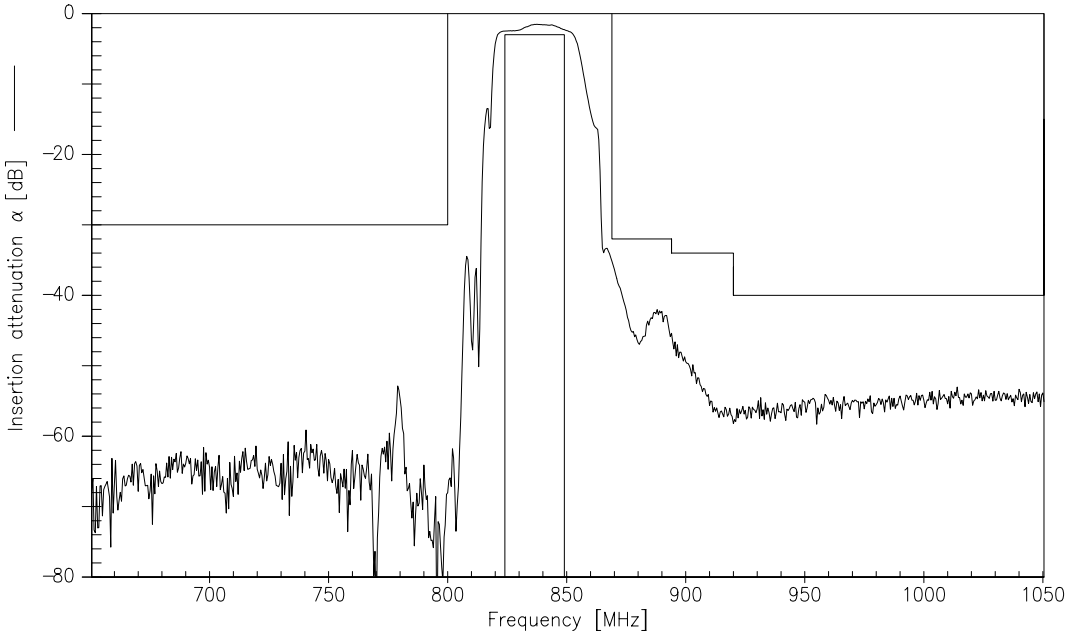
| | | min. | typ. | max. | |
|---|---|---|---|---|---|
| **Center frequency** | $f_C$ | — | 836,5 | — | MHz |
| **Maximum insertion attenuation** | $\alpha_{max}$ | | | | |
| 824,0 ... 849,0 MHz | | — | 2,6 | 3,0 | dB |
| **Amplitude ripple** (p-p) | $\Delta\alpha$ | | | | |
| 824,0 ... 849,0 MHz | | — | 1,1 | 1,5 | dB |
| **VSWR** | | | | | |
| 824,0 ... 849,0 MHz | | — | 1,92 | 2,0 | |
| **Attenuation** | $\alpha$ | | | | |
| 0,0 ... 800,0 MHz | | 30,0 | 50,0 | — | dB |
| 869,0 ... 894,0 MHz | | 32,0 | 34,0 | — | dB |
| 894,0 ... 920,0 MHz | | 34,0 | 40,0 | — | dB |
| 920,0 ...1210,0 MHz | | 40,0 | 55,0 | — | dB |
| 1210,0 ...1500,0 MHz | | 30,0 | 50,0 | — | dB |
| 1500,0 ...2000,0 MHz | | 25,0 | 50,0 | — | dB |
| 2000,0 ...2600,0 MHz | | 20,0 | 32,0 | — | dB |
| 2600,0 ...3000,0 MHz | | 15,0 | 28,0 | — | dB |

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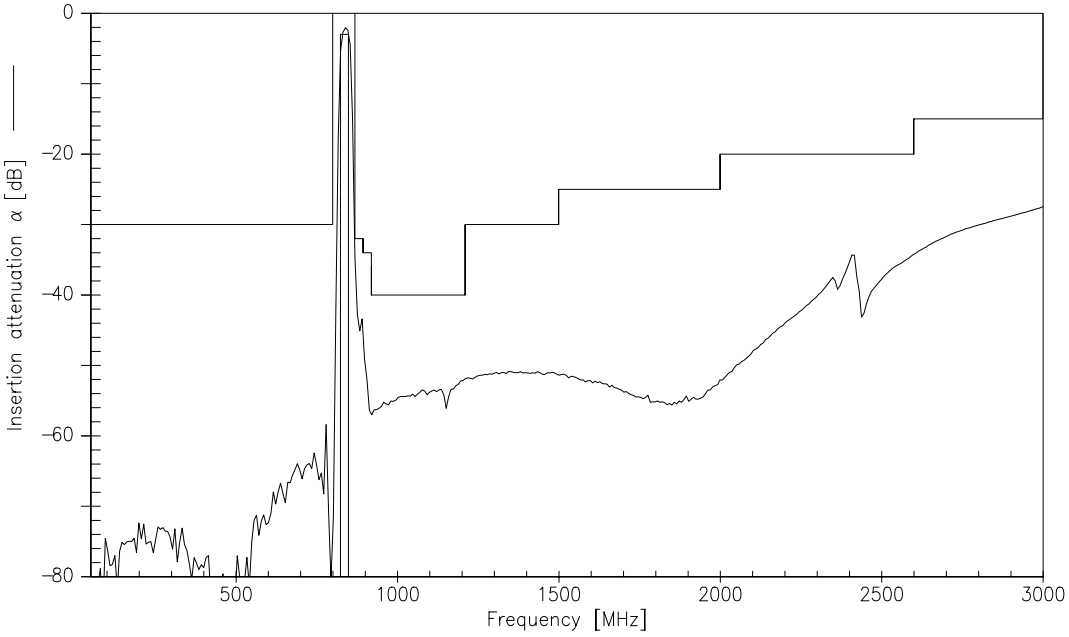
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## Transfer function

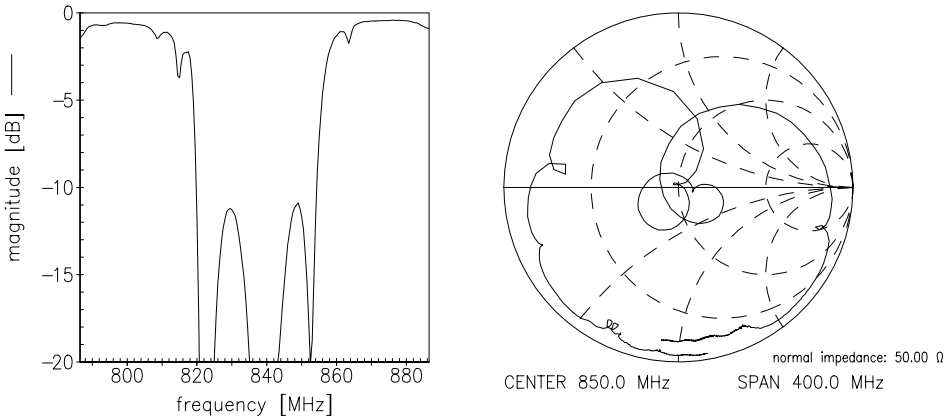



**Transfer function** (wideband)



## Reflection functions

$S_{11}$




$S_{22}$

