



SAW Components

Date Sheet B4130

Data Sheet

A large, stylized, 3D-rendered graphic of the EPCOS logo. The letters "EPCOS" are rendered in a white, glowing, sans-serif font, appearing to be part of a larger, curved structure that resembles the top of the EPCOS logo triangle. The background is dark and textured, with a faint map of the world visible.



SAW Components

B4130

Low-Loss Filter for Mobile Communication

897,5 MHz

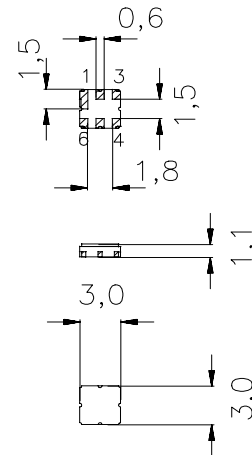
Data Sheet



Ceramic Package DCC6C

Features

- Low-loss RF filter for EGSM mobile systems
- Low amplitude ripple
- Usable passband 35 MHz
- No matching network required for operation at 50 Ω
- Ceramic Package for **Surface Mounted Technology (SMT)**
- RoHS compatible



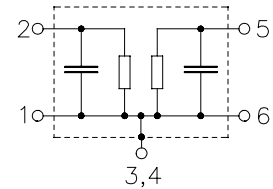
Terminals

- Ni, gold-plated

Pin configuration

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

Dimensions in mm, approx. weight 37mg



| Type | Ordering code | Marking and Package according to | Packing according to |
|-------|-------------------|----------------------------------|----------------------|
| B4130 | B39901-B4130-U410 | C61157-A7-A67 | F61074-V8168-Z000 |

Electrostatic Sensitive Device (ESD)

Maximum ratings

| | | | | |
|----------------------------|-------------|-----------|-----|--|
| Operable temperature range | T | -40 / +85 | °C | Machine Model, 10 pulses |
| Storage temperature range | T_{stg} | -40 / +85 | °C | |
| DC voltage | V_{DC} | 3 | V | |
| ESD voltage | V_{ESD}^* | 100* | V | |
| Input power max. | | | | |
| 925,0 ... 960,0 MHz | P_{IN} | 12 | dBm | |
| | P_{IN} | 15 | dBm | continuous wave, 85 °C |
| 880,0 ... 915,0 MHz | P_{IN} | 17 | dBm | continuous wave, 55 °C |
| | | | | effective power in the on-state, duty cycle 4:8, 85 °C |

* - acc. to JESD22-A115A (Machine Model), 10 negative & 10 positive pulses



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Characteristics

Operating temperature range: $T = 25 \pm 2 \text{ }^\circ\text{C}$
 Terminating source impedance: $Z_S = 50 \text{ } \Omega$
 Terminating load impedance: $Z_L = 50 \text{ } \Omega$

| | | | min. | typ. | max. | |
|--------------------------------------|-----------------|----------------------|------|--------|------|-----|
| Center frequency | f_c | | — | 897,50 | — | MHz |
| Maximum insertion attenuation | α_{\max} | 880,0 ... 915,0 MHz | — | 2,0 | 2,3 | dB |
| Amplitude ripple (p-p) | $\Delta\alpha$ | 880,0 ... 915,0 MHz | — | 0,8 | 1,1 | dB |
| Input VSWR | | 880,0 ... 915,0 MHz | — | 1,7 | 2,0 | |
| Output VSWR | | 880,0 ... 915,0 MHz | — | 1,7 | 2,0 | |
| Attenuation | α | 0,0 ... 860,0 MHz | 17 | 20 | — | dB |
| | | 925,0 ... 935,0 MHz | 5,5 | 13 | — | dB |
| | | 935,0 ... 960,0 MHz | 20 | 26 | — | dB |
| | | 960,0 ... 3660,0 MHz | 20 | 26 | — | dB |



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Characteristics

Operating temperature range: $T = -10$ to $+80^{\circ}\text{C}$
 Terminating source impedance: $Z_S = 50\ \Omega$
 Terminating load impedance: $Z_L = 50\ \Omega$

| | | min. | typ. | max. | |
|--------------------------------------|-----------------|------|--------|------|-----|
| Center frequency | f_c | — | 897,50 | — | MHz |
| Maximum insertion attenuation | α_{\max} | — | 2,0 | 2,5 | dB |
| 880,0 ... 915,0 MHz | | | | | |
| Amplitude ripple (p-p) | $\Delta\alpha$ | — | 0,8 | 1,3 | dB |
| 880,0 ... 915,0 MHz | | | | | |
| Input VSWR | | — | 1,7 | 2,0 | |
| 880,0 ... 915,0 MHz | | | | | |
| Output VSWR | | — | 1,7 | 2,0 | |
| 880,0 ... 915,0 MHz | | | | | |
| Attenuation | α | | | | |
| 0,0 ... 860,0 MHz | | 17 | 20 | — | dB |
| 925,0 ... 935,0 MHz | | 4 | 8 | — | dB |
| 935,0 ... 960,0 MHz | | 20 | 26 | — | dB |
| 960,0 ... 3660,0 MHz | | 20 | 26 | — | dB |



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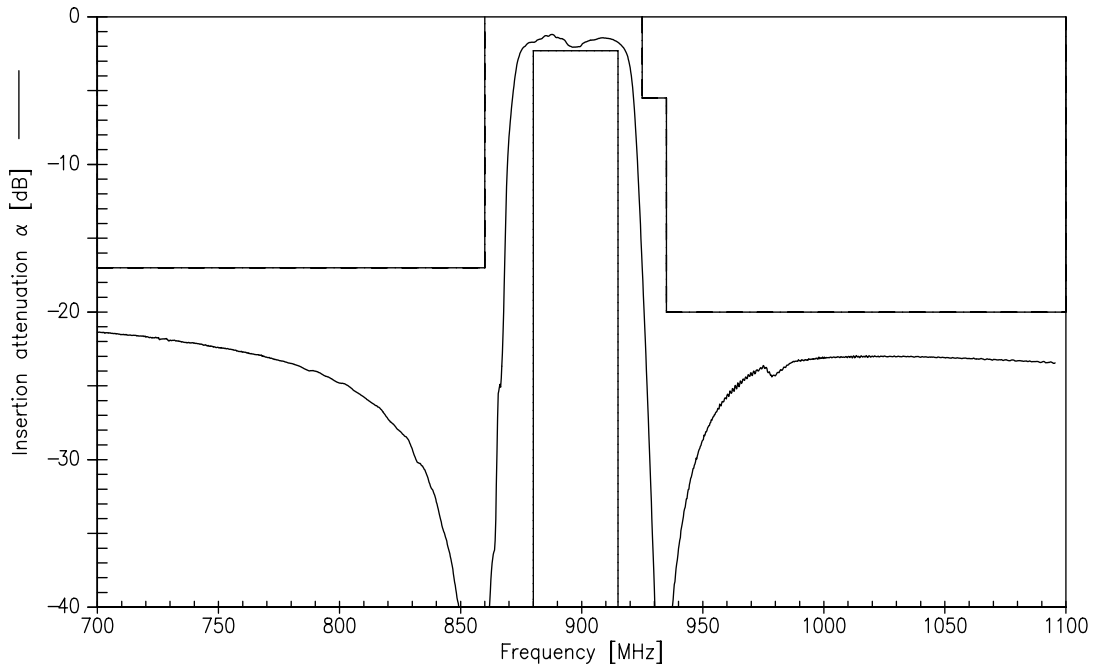
Characteristics

Operating temperature range: $T = -30$ to $+85^{\circ}\text{C}$
 Terminating source impedance: $Z_S = 50\ \Omega$
 Terminating load impedance: $Z_L = 50\ \Omega$

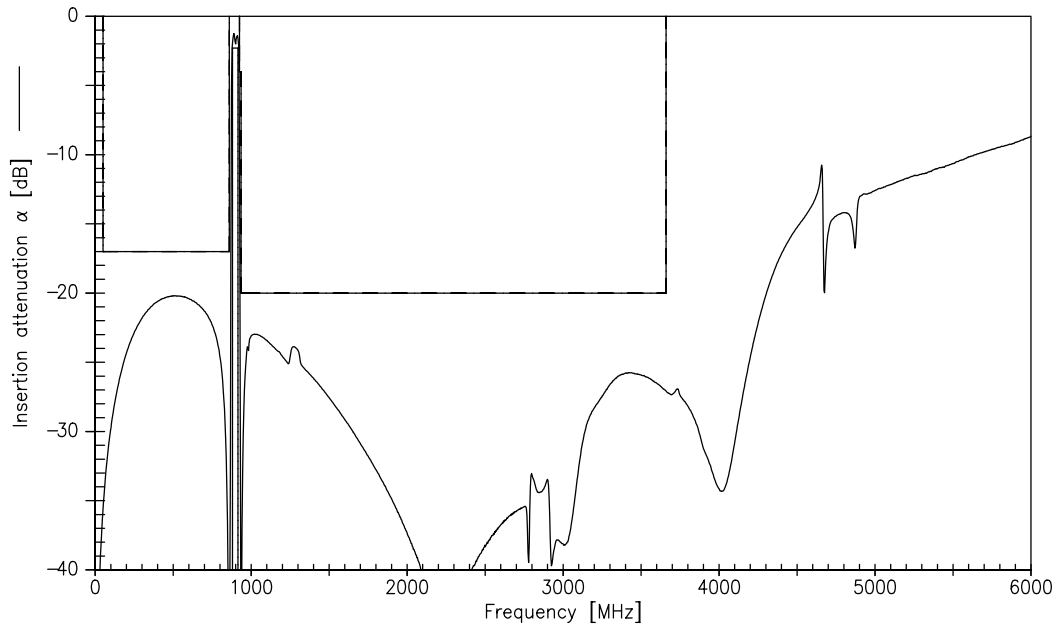
| | | | min. | typ. | max. | |
|--------------------------------------|-----------------|----------------------|------|--------|------|-----|
| Center frequency | f_c | | — | 897,50 | — | MHz |
| Maximum insertion attenuation | α_{\max} | 880,0 ... 915,0 MHz | — | 2,0 | 2,5 | dB |
| Amplitude ripple (p-p) | $\Delta\alpha$ | 880,0 ... 915,0 MHz | — | 0,8 | 1,3 | dB |
| Input VSWR | | 880,0 ... 915,0 MHz | — | 1,7 | 2,0 | |
| Output VSWR | | 880,0 ... 915,0 MHz | — | 1,7 | 2,0 | |
| Attenuation | α | 0,0 ... 860,0 MHz | 17 | 20 | — | dB |
| | | 925,0 ... 935,0 MHz | 3,2 | 7 | — | dB |
| | | 935,0 ... 960,0 MHz | 20 | 26 | — | dB |
| | | 960,0 ... 3660,0 MHz | 20 | 26 | — | dB |



Transfer function



Transfer function (wideband)





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