



SAW Components

Data Sheet B3894

Data Sheet

An abstract, grayscale graphic featuring a large, stylized, and slightly blurred "EPCOS" logo. The logo is set against a background of curved, overlapping bands and a faint world map, creating a sense of global connectivity and technology.



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Low Loss Filter for Mobile Communication

210,00 MHz

Data Sheet



Characteristics single-ended/balanced

Operating temperature: $T = -30\text{ °C} \dots +80\text{ °C}$
Terminating source impedance: $Z_S = 1000\ \Omega \parallel 70\text{ nH}$
Terminating load impedance: $Z_L = 400\ \Omega \parallel 60\text{ nH}$

| | | min. | typ. | max. | |
|---|----------------|------|--------|------|--------------------|
| Nominal frequency | f_N | — | 210,00 | — | MHz |
| Insertion attenuation at f_N (including loss in matching network without loss in baluns) | α_{fN} | — | 8,5 | 10,0 | dB |
| Amplitude ripple (p-p) $f_N - 0,30 \dots f_N + 0,30$ MHz | $\Delta\alpha$ | — | 0,6 | 1,2 | dB |
| Phase linearity (rms deviation) $f_N - 0,63 \dots f_N + 0,63$ MHz | $\Delta\phi$ | — | 2,5 | 3,5 | ° |
| Relative attenuation (relative to α_{fN}) $f_N - 0,63 \dots f_N + 0,63$ MHz | α_{rel} | — | 3,5 | 5,0 | dB |
| $f_N - 100,0 \dots f_N - 50,0$ MHz | | 60,0 | 80,0 | — | dB |
| $f_N - 50,0 \dots f_N - 30,0$ MHz | | 50,0 | 65,0 | — | dB |
| $f_N - 30,0 \dots f_N - 10,0$ MHz | | 40,0 | 55,0 | — | dB |
| $f_N - 10,0 \dots f_N - 1,25$ MHz | | 35,0 | 38,0 | — | dB |
| $f_N - 1,25$ MHz | | 37,0 | 41,0 | — | dB |
| $f_N + 1,25$ MHz | | 37,0 | 41,0 | — | dB |
| $f_N + 1,25 \dots f_N + 10,0$ MHz | | 35,0 | 41,0 | — | dB |
| $f_N + 10,0 \dots f_N + 30,0$ MHz | | 40,0 | 55,0 | — | dB |
| $f_N + 30,0 \dots f_N + 50,0$ MHz | | 50,0 | 60,0 | — | dB |
| $f_N + 50,0 \dots f_N + 100,0$ MHz | | 60,0 | 70,0 | — | dB |
| Temperature coefficient of frequency ¹⁾ | TC_f | — | -0,036 | — | ppm/K ² |
| Frequency inversion point | T_0 | — | 30 | — | °C |

¹⁾ Temperature dependence of f_c : $f_c(T) = f_c(T_0)(1 + TC_f(T - T_0)^2)$



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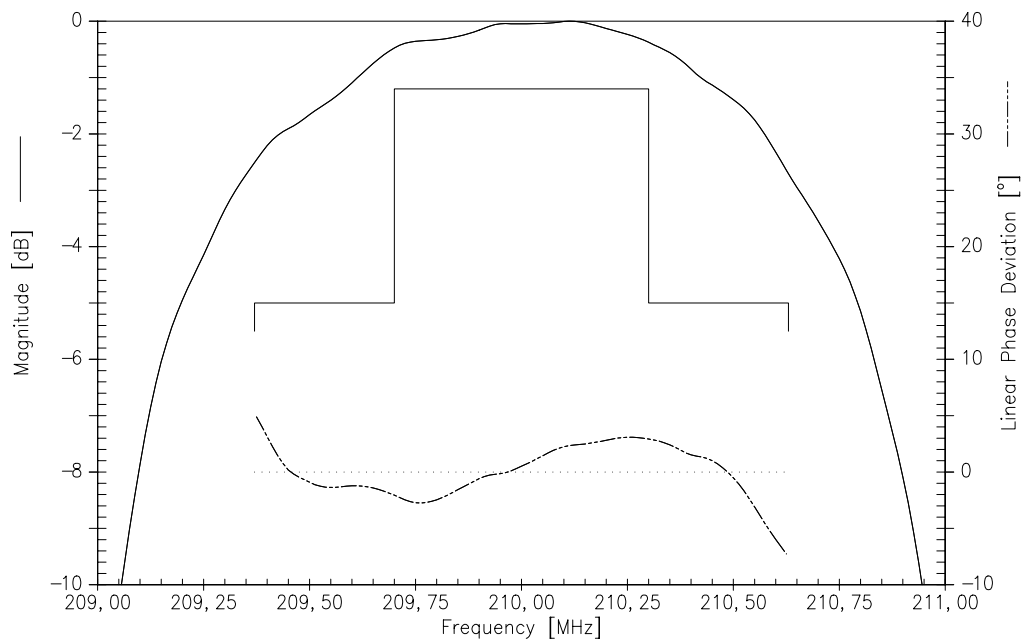
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210,00 MHz

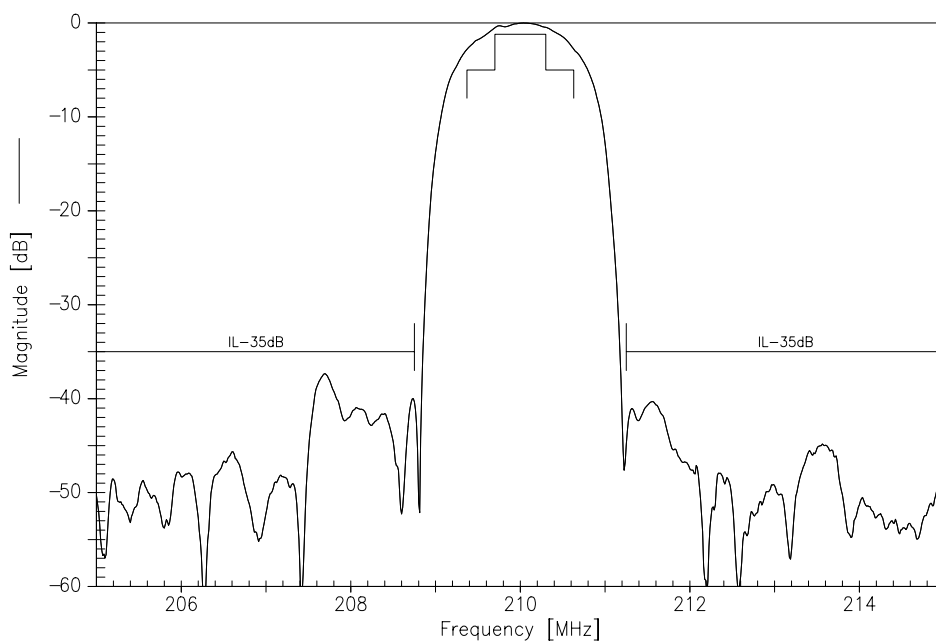
Data Sheet



Transfer function (passband, single-ended/balanced):



Transfer function (narrowband, single-ended/balanced):





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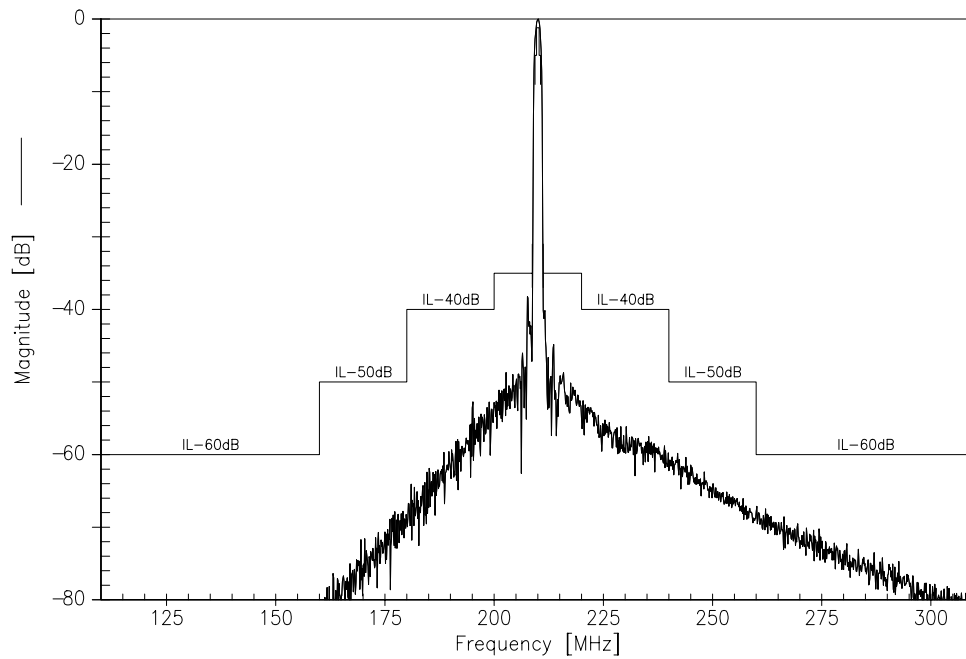
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Transfer function (wideband, single-ended/balanced):





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