



SAW Components

Data Sheet B4934

Data Sheet

An abstract, grayscale graphic featuring a stylized, three-dimensional representation of the EPCOS logo. The letters "EPCOS" are rendered in a bold, sans-serif font, appearing to be part of a larger, curved structure that resembles a globe or a stylized wave. The background is dark and textured, with light reflecting off the surfaces of the logo.



SAW Components

B4934

Low Loss Filter for Mobile Communication

210,38 MHz

Data Sheet



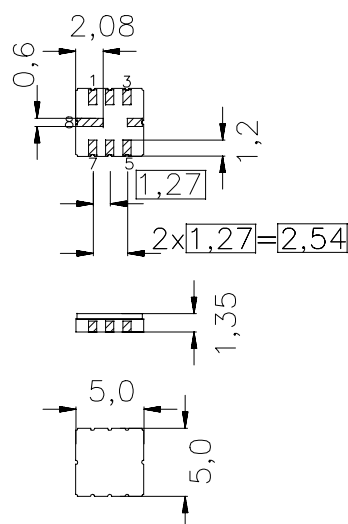
Features

- IF filter for mobile telephone
- Channel selection in CDMA systems
- Low insertion attenuation
- Extremely high rejection
- Single-ended/single-ended, balanced/single-ended and balanced/balanced operation possible
- Optimized for single-ended/balanced operation
- Very small size
- Package for **Surface Mounted Technology (SMT)**

Terminals

- Ni, gold plated

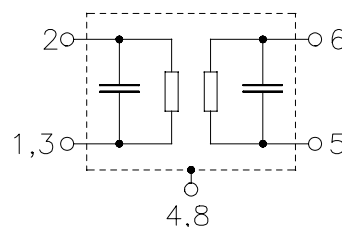
Ceramic package **QCC8C**



Dimensions in mm, approx. weight 0,07 g

Pin configuration

- | | |
|------|----------------------------------|
| 2 | Input |
| 1+3 | Input ground or balanced input |
| 6 | Output |
| 5 | Output ground or balanced output |
| 7 | to be grounded |
| 4, 8 | Case ground |



Device is reciprocal, i.e. inputs can be used as outputs and vice versa

Type	Ordering code	Marking and Package according to	Packing according to
B4934	B39211-B4934-U310	C61157-A7-A53	F61074-V8070-Z000

Electrostatic Sensitive Device (ESD)

Maximum ratings

Operable temperature range	T	- 30/+ 85	°C
Storage temperature range	T_{stg}	- 40/+ 85	°C
DC voltage	V_{DC}	13	V
Source power	P_s	10	dBm



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Characteristics single-ended/balanced

Operating temperature:	$T = -30\text{ °C} \dots +80\text{ °C}$
Terminating source impedance:	$Z_S = 980\ \Omega \parallel 64\text{ nH}$
Terminating load impedance:	$Z_L = 570\ \Omega \parallel 61\text{ nH}$

		min.	typ.	max.	
Nominal frequency	f_N	—	210,38	—	MHz
Insertion attenuation at f_N (including loss in matching network without loss in baluns)	α_{fN}	—	8,7	10,0	dB
Amplitude ripple (p-p) $f_N - 0,30 \dots f_N + 0,30$ MHz	$\Delta\alpha$	—	0,7	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	73,0	—	dB
$f_N - 50,0 \dots f_N - 30,0$ MHz		50,0	70,0	—	dB
$f_N - 30,0 \dots f_N - 10,0$ MHz		40,0	64,0	—	dB
$f_N - 10,0 \dots f_N - 1,25$ MHz		35,0	39,0	—	dB
$f_N - 1,25$ MHz		41,0	45,0	—	dB
$f_N + 1,25$ MHz		41,0	45,0	—	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	61,0	—	dB
$f_N + 30,0 \dots f_N + 50,0$ MHz		50,0	72,0	—	dB
$f_N + 50,0 \dots f_N + 100,0$ MHz		60,0	77,0	—	dB
Reflected wave signal suppression		30,0	36,0	—	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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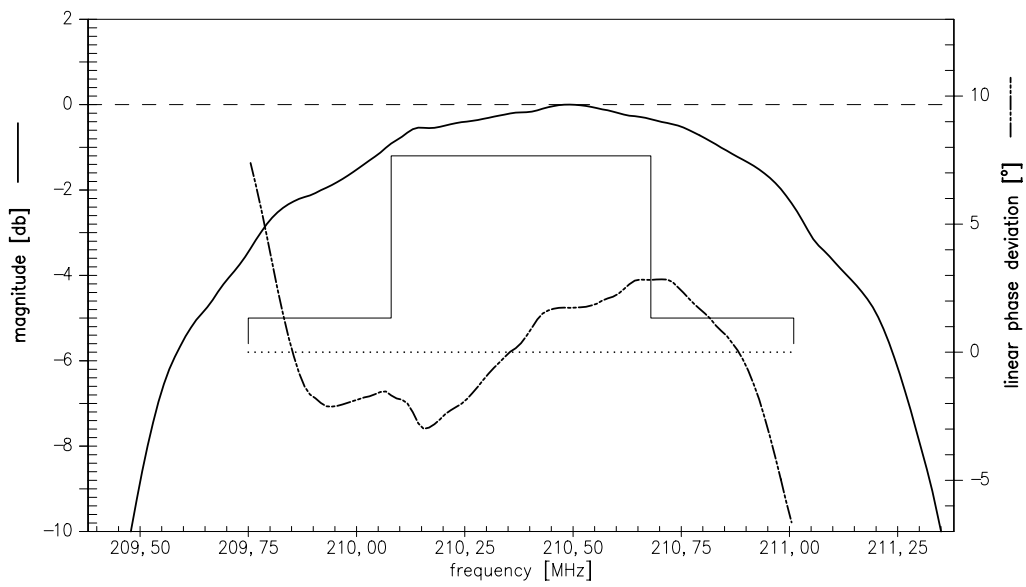
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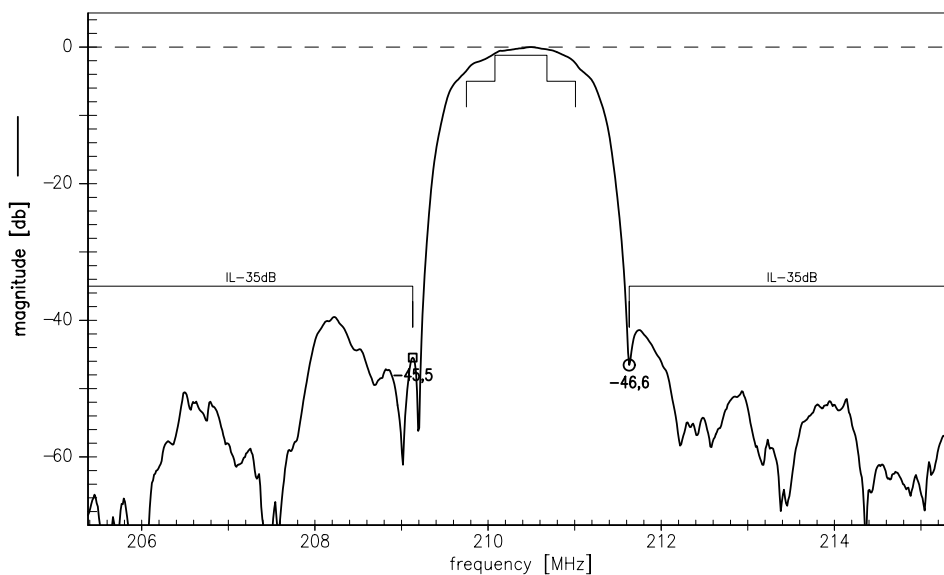
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Transfer function (passband, single-ended/balanced):



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





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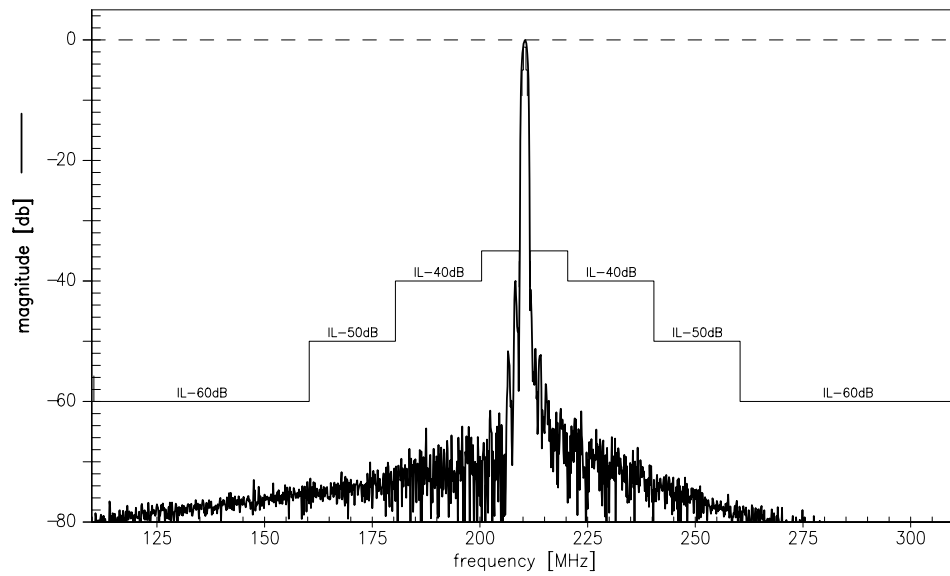
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Transfer function (wideband, single-ended/balanced):





SAW Components	B4934
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Data Sheet	SMD

Published by EPCOS AG
Surface Acoustic Wave Components Division, OFW E MF
P.O. Box 80 17 09, D-81617 München

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