EPCOS

SAW Components

Data Sheet B4934

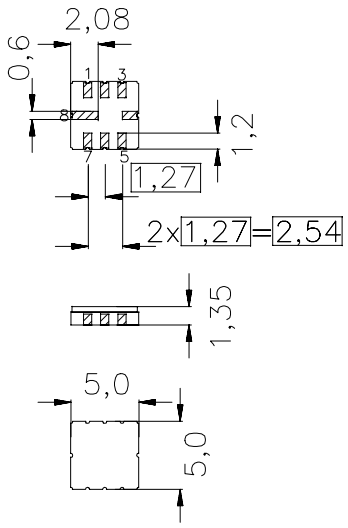
Features

- 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 **S**urface **M**ounted **T**echnology (**SMT**)

Terminals

- Ni, gold plated

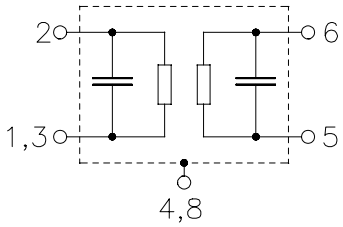
Ceramic package **QCC8C**



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 **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}	13	V
Source power	P_s	10	dBm

Data Sheet SMD

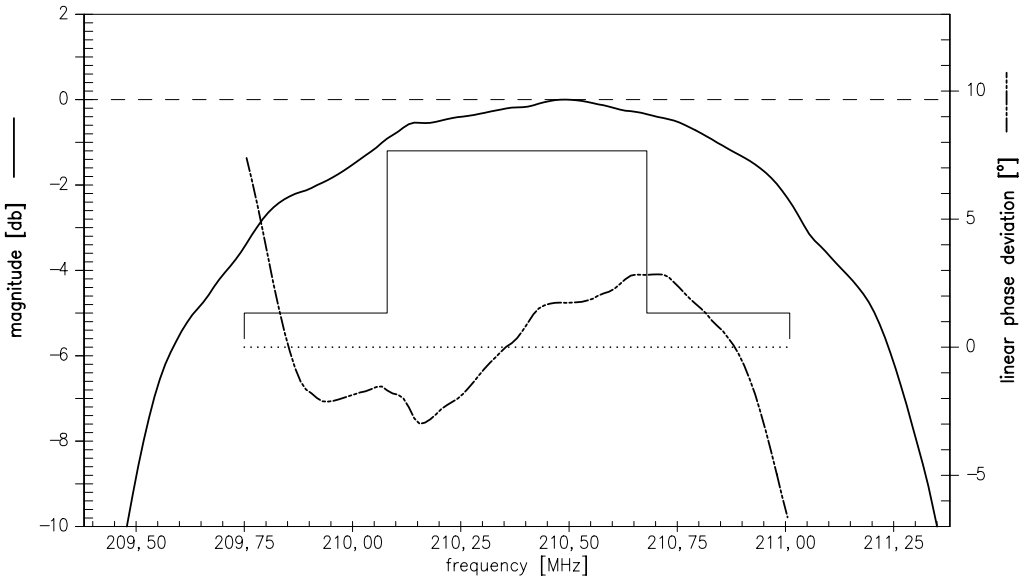
Characteristics single-ended/balanced

Operating temperature: T = -30 ˚C ... +80 ˚C
Terminating source impedance: Z_S = 980 Ω || 64 nH
Terminating load impedance: Z_L = 570 Ω || 61 nH

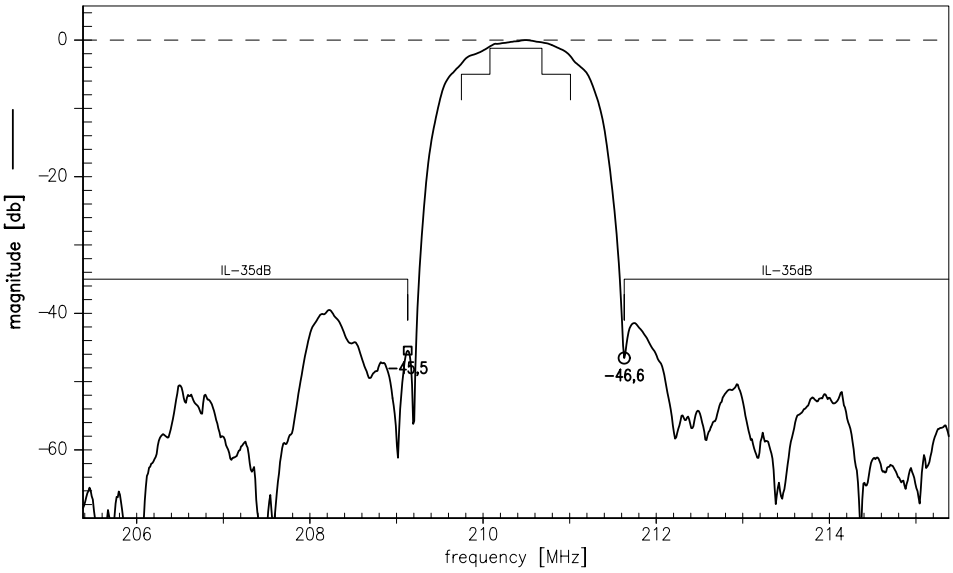
		min.	typ.	max.	
Nominal frequency	f_N	—	210,38	—	MHz
Insertion attenuation at f_N (including loss in matching network without loss in baluns)	α_{fN}	—	8,7	10,0	dB
Amplitude ripple (p-p)	$\Delta\alpha$				
f_N – 0,30 ... f_N + 0,30 MHz		—	0,7	1,2	dB
Phase linearity (rms deviation)	$\Delta\phi$				
f_N – 0,63 ... f_N + 0,63 MHz		—	2,5	3,5	˚
Relative attenuation (relative to α_{fN})	α_{rel}				
f_N – 0,63 ... f_N + 0,63 MHz		—	3,5	5,0	dB
f_N – 100,0 ... f_N – 50,0 MHz		60,0	73,0	—	dB
f_N – 50,0 ... f_N – 30,0 MHz		50,0	70,0	—	dB
f_N – 30,0 ... f_N – 10,0 MHz		40,0	64,0	—	dB
f_N – 10,0 ... 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 ... f_N + 10,0 MHz		35,0	41,0	—	dB
f_N + 10,0 ... f_N + 30,0 MHz		40,0	61,0	—	dB
f_N + 30,0 ... f_N + 50,0 MHz		50,0	72,0	—	dB
f_N + 50,0 ... f_N+100,0 MHz		60,0	77,0	—	dB
Temperature coefficient of frequency [1]	TC_f	—	–0,036	—	ppm/K²
Frequency inversion point	T_0	—	30	—	˚C

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

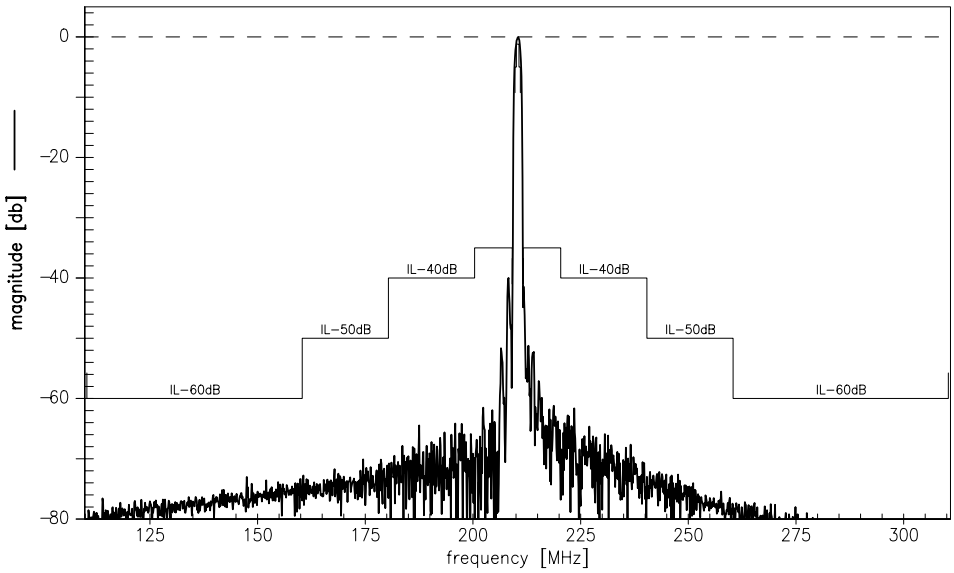
Transfer function (passband, single-ended/balanced):



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



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



Published by EPCOS AG
Surface Acoustic Wave Components Division, SAW MC WT PD
P.O. Box 80 17 09, D-81617 München

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