EPCOS

SAW Components

Data Sheet B4935

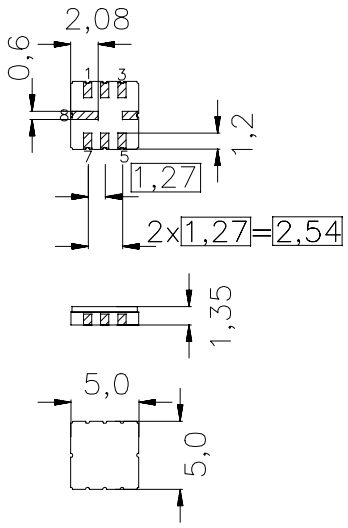
Features

- IF filter for mobile telephone
- Channel selection in CDMA systems, Korean PCS
- 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

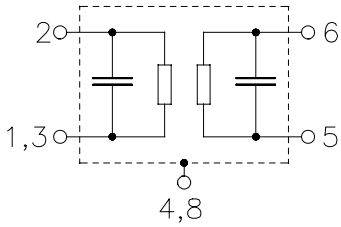
Ceramic package **QCC8C**



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
B4935	B39221-B4935-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

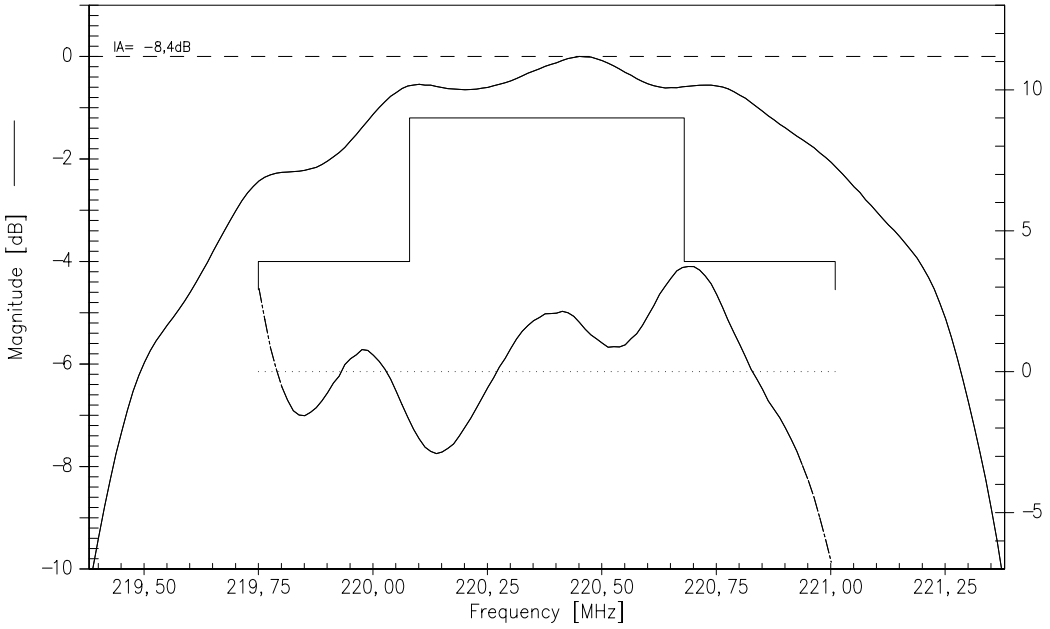
Characteristics single-ended/balanced

Operating temperature: T = -30 ˚C to +80 ˚C
Terminating source impedance: Z_S = 1050 Ω || 63 nH
Terminating load impedance: Z_L = 610 Ω || 60 nH

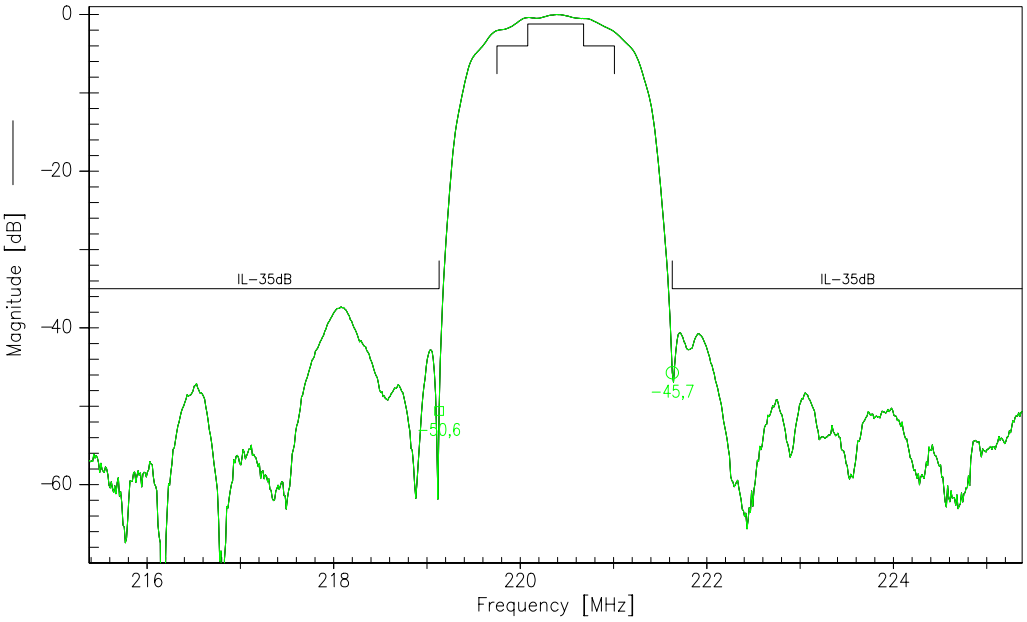
		min.	typ.	max.	
Nominal frequency	f_N	—	220,38	—	MHz
Insertion attenuation at f_N (including loss in matching network without loss in baluns)	α_{fN}	—	8,2	9,5	dB
Amplitude ripple (p-p)	$\Delta\alpha$				
f_N – 0,30 ... f_N + 0,30 MHz		—	05	1,2	dB
Phase linearity (rms deviation)	$\Delta\phi$				
f_N – 0,63 ... f_N + 0,63 MHz		—	2,3	3,2	°
Relative attenuation (relative to α_{fN})	α_{rel}				
f_N – 0,63 ... f_N + 0,63 MHz		—	2,2	4,0	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	62,0	—	dB
f_N – 10,0 ... f_N – 1,25 MHz		35,0	39,0	—	dB
f_N – 1,25 MHz			45,0	—	dB
f_N + 1,25 MHz			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	62,0	—	dB
f_N + 30,0 ... f_N + 50,0 MHz		50,0	70,0	—	dB
f_N + 50,0 ... f_N+100,0 MHz		60,0	73,0	—	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: $f_c(T) = f_c(T_0)(1 + TC_f(T - T_0)^2)$

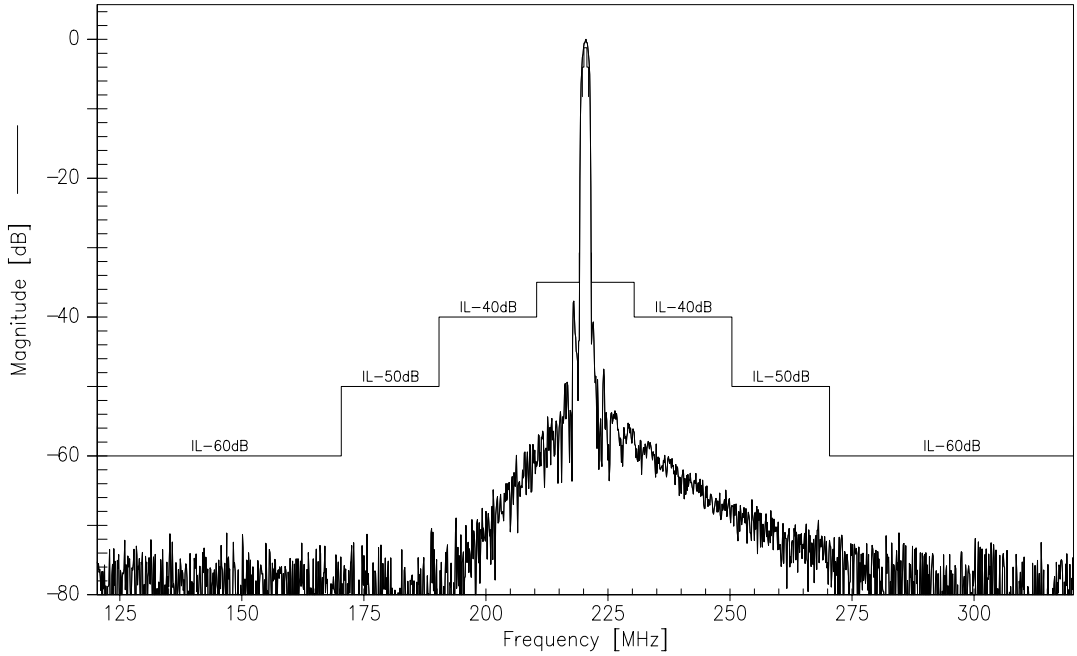
Transfer function (passband, single-ended/balanced):



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



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



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

The information contained in this brochure describes the type of component and shall not be considered as guaranteed characteristics. Purchase orders are subject to the General Conditions for the Supply of Products and Services of the Electrical and Electronics Industry recommended by the ZVEI (German Electrical and Electronic Manufacturers' Association), unless otherwise agreed.

This brochure replaces the previous edition.

For questions on technology, prices and delivery please contact the Sales Offices of EPCOS AG or the international Representatives.

Due to technical requirements components may contain dangerous substances. For information on the type in question please also contact one of our Sales Offices.