EPCOS

SAW Components

Data Sheet B3895

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SAW Components	B3895
Low-Loss Filter	**204,0 MHz**

Data Sheet

Ceramic package **QCC12C**

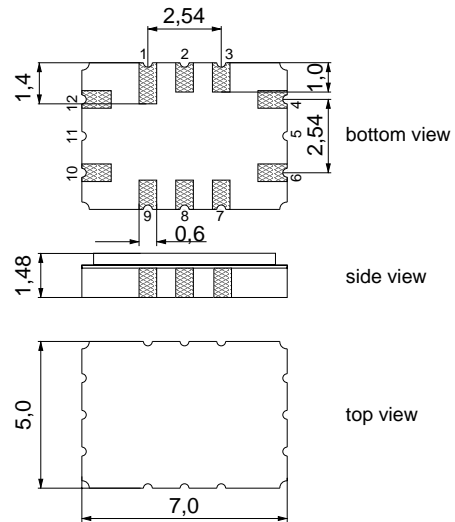bottom view

side view

top view

Dimensions in mm, approx. weight 0,2 g

Features

- Low-loss IF filter for S-CDMA applications
- 500 kHz usable bandwidth
- Temperature stable
- Ceramic SMD package

Terminals

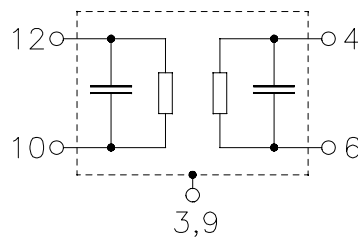- Gold plated

Pin configuration

12	Input
10	Input ground
6	Output
4	Output ground
1, 2, 7, 8	Ground
3, 9	Case ground

Type	Ordering code	Marking and Package according to	Packing according to
B3895	B39201-B3895-H310	C61157-A7-A95	F61074-V8170-Z000

Electrostatic **S**ensitive **D**evice (**ESD**)

Maximum ratings

Operable temperature range	T	–40 / +80	˚C	
Storage temperature range	T_{stg}	–40 / +85	˚C	
DC voltage	V_{DC}	0	V	
Source power	P_s	0	dBm	

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Characteristics

Operating temperature range: $T = 0 .. 70\ °C$
Terminating source impedance: $Z_S = 50\ \Omega$ and matching network
Terminating load impedance: $Z_L = 50\ \Omega$ and matching network

		min.	typ.	max.	
Nominal frequency	f_N	—	204,0	—	MHz
Minimum insertion attenuation	α_{min}	—	9,0	10,0	dB
Pass bandwidth					
$\alpha_{rel}\ \leq 1,0$ dB	B_{1dB}	—	700	—	kHz
$\alpha_{rel}\ \leq 3,0$ dB	B_{3dB}	—	1150	—	kHz
Amplitude ripple (p-p)	$\Delta\alpha$				
$f_N \pm 250$ kHz		—	0,5	1,0	dB
Absolute group delay	τ				
@ f_N		—	0,8	—	µs
Group delay ripple (p-p)	$\Delta\tau$				
$f_N \pm 250$ kHz		—	30	100	ns
Relative attenuation (relative to α_{min})	α_{rel}				
$f_N - 10,0$ MHz ... $f_N - 2,0$ MHz		45	48	—	dB
$f_N + 2,0$ MHz ... $f_N + 3,5$ MHz		45	50	—	dB
$f_N + 3,5$ MHz ... $f_N + 4,5$ MHz		44	46	—	dB
$f_N + 4,5$ MHz ... $f_N + 10,0$ MHz		45	48	—	dB
Temperature coefficient of frequency [1]	TC_f	—	−0,036	—	ppm/K^2
Turnover temperature	T_0	—	35	—	°C

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

Matching network to 50 Ω (Element values depend on PCB layout)
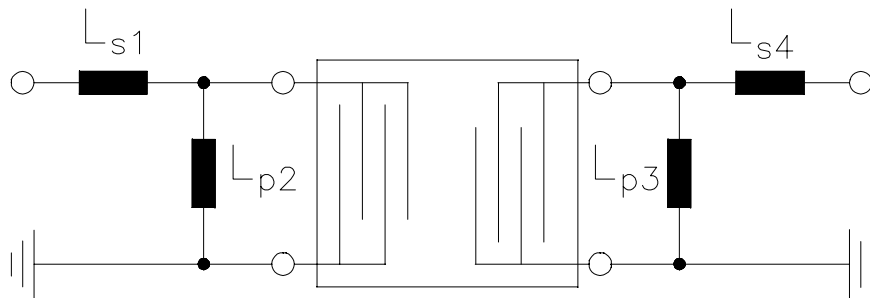
L_{s1} = 150 nH

L_{p2} = 120 nH

L_{p3} = 150 nH

L_{s4} = 100 nH

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Normalized frequency response
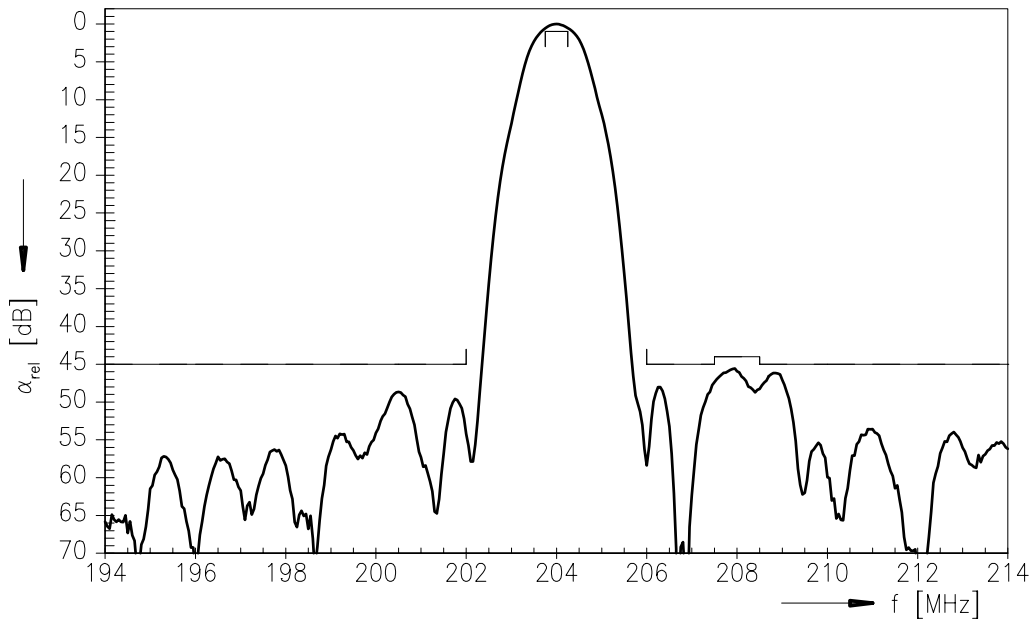
Normalized frequency response (pass band)

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.