



# SAW Components

Data Sheet B4955

Data Sheet

A large, stylized, 3D graphic 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 stylized globe or a series of overlapping planes. The graphic is in grayscale and has a metallic, reflective appearance.



## SAW Components

B4955

## Low-Loss Filter for Mobile Communication

183,6 MHz

### Data Sheet



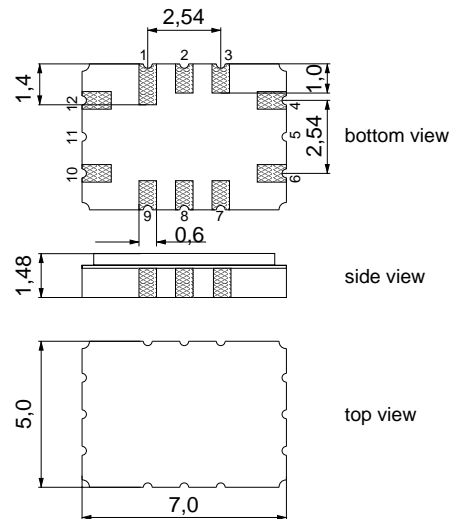
#### Features

- IF filter for mobile telephone
- Channel selection in CDMA systems
- Balanced or unbalanced
- High rejection, very small size
- Low amplitude ripple
- Package for **Surface Mounted Technology (SMT)**
- Filter surface passivated

#### Terminals

- Ni, gold plated

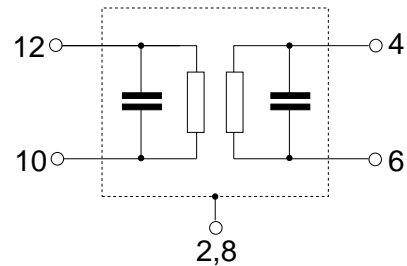
#### SMD ceramic package QCC12C



Dimensions in mm, approx. weight 0,25 g

#### Pin configuration

- |                  |                           |
|------------------|---------------------------|
| 12               | Input                     |
| 10               | Balanced input or ground  |
| 6                | Output                    |
| 4                | Balanced output or ground |
| 1, 2, 3, 7, 8, 9 | To be grounded            |



Type	Ordering code	Marking and Package according to	Packing according to
B4955	B39181-B4955-H310	C61157-A7-A95	F61074-V8170-Z000

Electrostatic Sensitive Device (ESD)

#### Maximum ratings

Operable temperature range	$T$	- 40/+ 85	°C	
Storage temperature range	$T_{stg}$	- 40/+ 85	°C	
DC voltage	$V_{DC}$	0	V	
Source power	$P_s$	10	dBm	



# SAW Components

B4955

## Low-Loss Filter for Mobile Communication

183,6 MHz

### Data Sheet



### Characteristics

Specified temperature range:  $T = -30^{\circ}\text{C} \dots +85^{\circ}\text{C}$

Terminating source impedance:  $Z_S = 300\Omega \parallel 44\text{nH}$

Terminating load impedance:  $Z_L = 675\Omega \parallel 54\text{nH}$

		min.	typ.	max.	
<b>Nominal frequency</b>	$f_N$	—	183,6	—	MHz
<b>Minimum insertion attenuation</b> (including loss in matching network without loss in balun)	$\alpha_{\min}$	—	8,1	9,5	dB
<b>Amplitude ripple</b>	$\Delta\alpha$				
$f_N - 0,3 \text{ MHz} \dots f_N + 0,3 \text{ MHz}$		—	0,6	1,2	dB
<b>Phase linearity (rms deviation)</b>					
$f_N - 0,615\text{MHz} \dots f_N + 0,615 \text{ MHz}$		—	1,3	2,8	°
<b>Relative attenuation (relative to <math>\alpha_{\min}</math>)</b>	$\alpha_{\text{rel}}$				
$f_N \pm 0,615\text{MHz}$		—	4,0	5,5	dB
$f_N - 0,9 \text{ MHz}$		33	39	—	dB
$f_N + 0,9 \text{ MHz}$		33	45	—	dB
$f_N - 1,25 \text{ MHz}$		33	44	—	dB
$f_N + 1,25 \text{ MHz}$		33	39	—	dB
$f_N - 1,7 \text{ MHz}$		33	37	—	dB
$f_N + 1,7 \text{ MHz}$		33	43	—	dB
$f_N \pm 2,05 \text{ MHz}$		33	42	—	dB
$f_N - 9,0 \text{ MHz} \dots f_N - 1,25 \text{ MHz}$		33	35	—	dB
$f_N + 1,25 \text{ MHz} \dots f_N + 9,0 \text{ MHz}$		33	37	—	dB



SAW Components

B4955

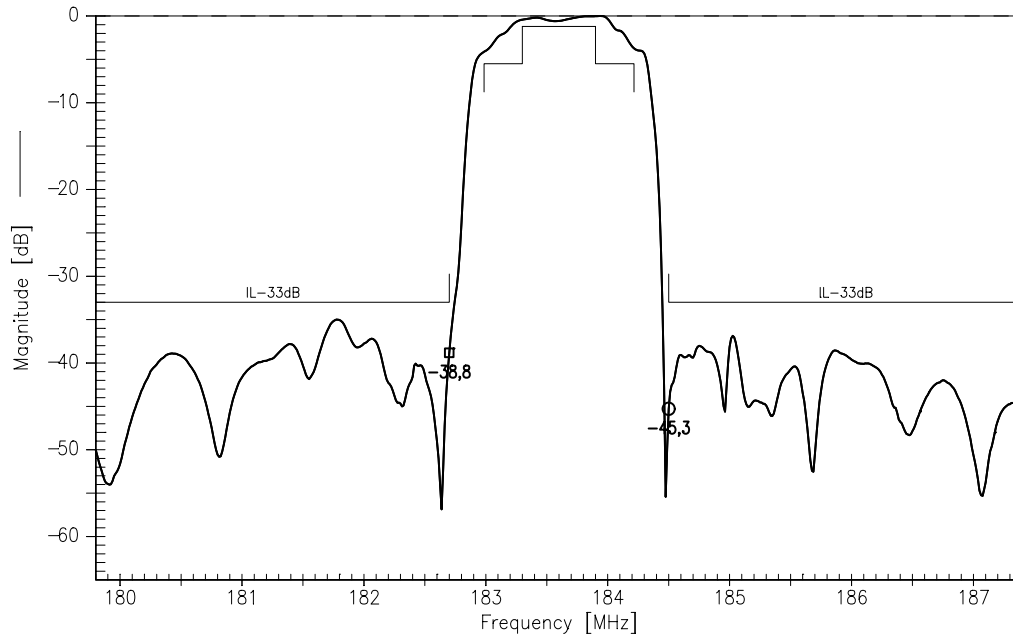
Low-Loss Filter for Mobile Communication

183,6 MHz

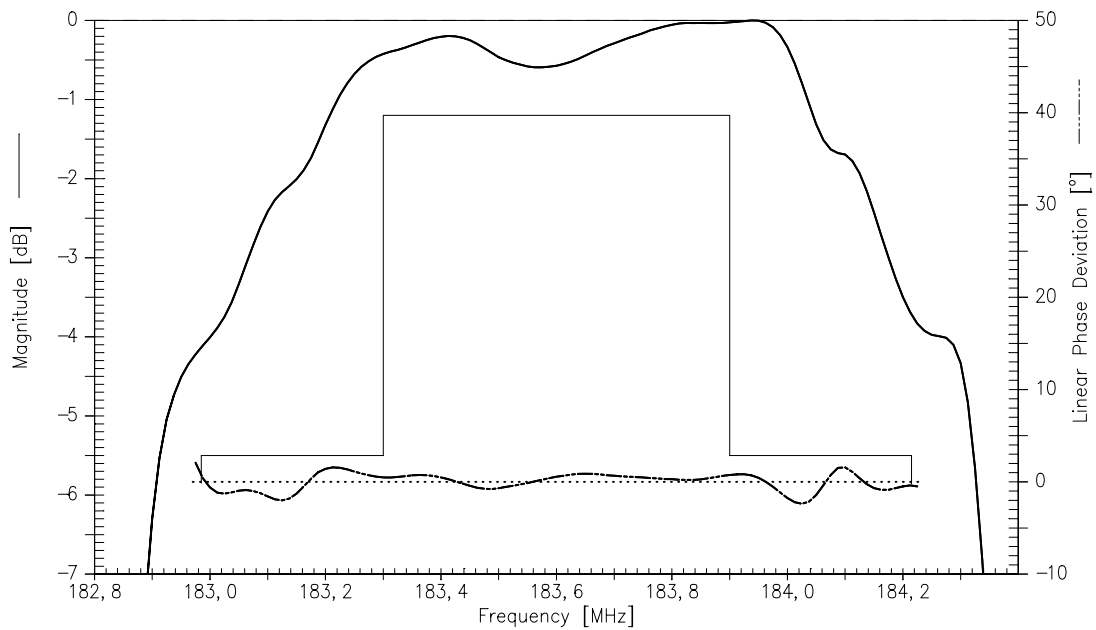
Data Sheet



Normalized transfer function (measurement):



Normalized transfer function (measurement, passband):

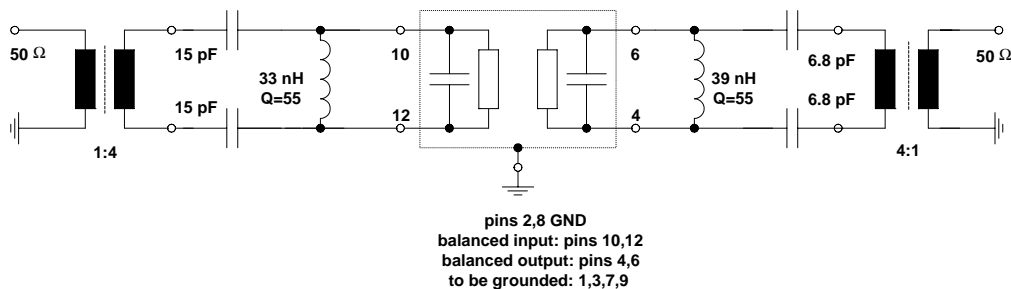


**SAW Components****B4955****Low-Loss Filter for Mobile Communication****183,6 MHz**

Data Sheet

**Test matching network**

(Element values depend on pcb layout)

**Published by EPCOS AG****Surface Acoustic Wave Components Division, SAW MC WT  
P.O. Box 80 17 09, 81617 Munich, GERMANY**

© EPCOS AG 2003. Reproduction, publication and dissemination of this brochure and the information contained therein without EPCOS' prior express consent is prohibited.

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.