



SAW Components

Data Sheet B4068

Data Sheet

An abstract graphic featuring the word "EPCOS" in large, glowing, 3D letters. The letters are white with a bright, circular highlight in the center of each, giving them a three-dimensional appearance. They are set against a dark, textured background that includes a faint, glowing globe and circuitry patterns, suggesting a high-tech or global theme.



SAW Components

B4068

Low-Loss Filter for Mobile Communication

904,5 / 925,5 MHz

Data Sheet



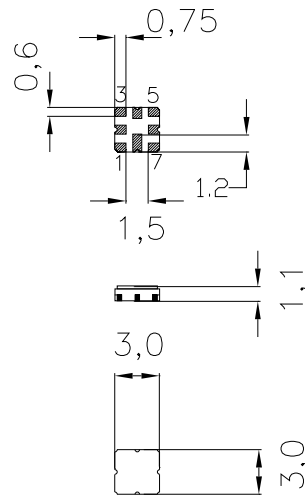
Ceramic package QCC8D

Features

- Compact RF duplexer for cordless telephone ISM
- No matching network required for operation at 50 Ω
- Ceramic package for Surface Mounted Technology (SMT)

Terminals

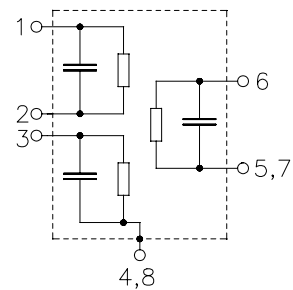
- Gold-plated, Ni



Dimensions in mm, approx. weight 0,037 g

Pin configuration

- | | |
|------|--------------------|
| 1 | Transmitter (Tx) |
| 3 | Receiver (Rx) |
| 6 | Antenna (Ant) |
| 2 | Tx - ground |
| 4, 8 | Case / Rx - ground |
| 5, 7 | Ant - ground |



Type	Ordering code	Marking and Package according to	Packing according to
B4068	B39931-B4068-U810	C61157-A7-A72-X-27	F61074-V8101-Z000

Electrostatic Sensitive Device (ESD)

Maximum ratings

Operating temperature range	T	- 10/ +55	$^{\circ}\text{C}$	
Storage temperature range	T_{stg}	- 40/ +85	$^{\circ}\text{C}$	
DC voltage	V_{DC}	0	V	
Source power	P_{s}	10	dBm	



SAW Components

B4068

Low-Loss Filter for Mobile Communication

904,5 / 925,5 MHz

Data Sheet



Characteristics Tx - Ant

Operable temperature range	T_A	= -10 to 55 °C
Ant term. impedance	Z_{Ant}	= 50 Ω
Port 1 term. impedance	$Z_{Port 1}$	= 50 Ω
Port 2 term. impedance	$Z_{Port 2}$	= 50 Ω

		min.	typ.	max.	
Center frequency	f_c	—	904,5	—	MHz
Maximum insertion attenuation	α_{max}				
	902,30 ... 906,65 MHz	—	3,6	4,0	dB
Amplitude ripple (p-p)	$\Delta\alpha$				
	902,30 ... 906,65 MHz	—	0,5	1,5	dB
Absolute attenuation	α				
	450,00 ... 850,00 MHz	40	54	—	dB
	850,00 ... 870,00 MHz	28	54	—	dB
	870,00 ... 890,00 MHz	10	39	—	dB
	924,90 ... 927,60 MHz	38	44	—	dB
	960,00 ... 1000,00 MHz	48	54	—	dB
	1000,00 ... 1600,00 MHz	40	51	—	dB
	1600,00 ... 2500,00 MHz	25	35	—	dB

Characteristics Rx - Ant

Operable temperature range	T_A	= -10 to 55 °C
Ant term. impedance	Z_{Ant}	= 50 Ω
Port 1 term. impedance	$Z_{Port 1}$	= 50 Ω
Port 2 term. impedance	$Z_{Port 2}$	= 50 Ω

		min.	typ.	max.	
Center frequency	f_c	—	926,25	—	MHz
Maximum insertion attenuation	α_{max}				
	923,10 ... 927,75 MHz	—	3,4	4,0	dB
Amplitude ripple (p-p)	$\Delta\alpha$				
	923,10 ... 927,75 MHz	—	0,5	1,5	dB
Absolute attenuation	α				
	450,00 ... 884,80 MHz	40	45	—	dB
	884,80 ... 903,50 MHz	35	38	—	dB
	903,50 ... 906,20 MHz	37	40	—	dB
	946,30 ... 967,70 MHz	25	29	—	dB
	967,70 ... 1100,00 MHz	30	43	—	dB
	1100,00 ... 2000,00 MHz	30	43	—	dB
	2000,00 ... 3000,00 MHz	25	33	—	dB
	3000,00 ... 3500,00 MHz	20	30	—	dB



SAW Components

B4068

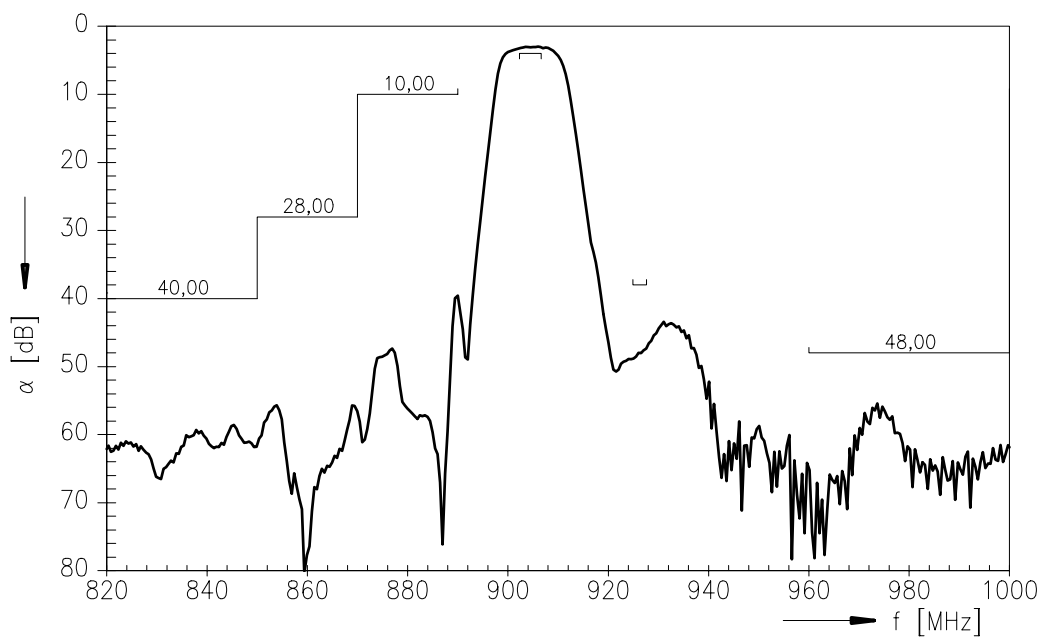
Low-Loss Filter for Mobile Communication

904,5 / 925,5 MHz

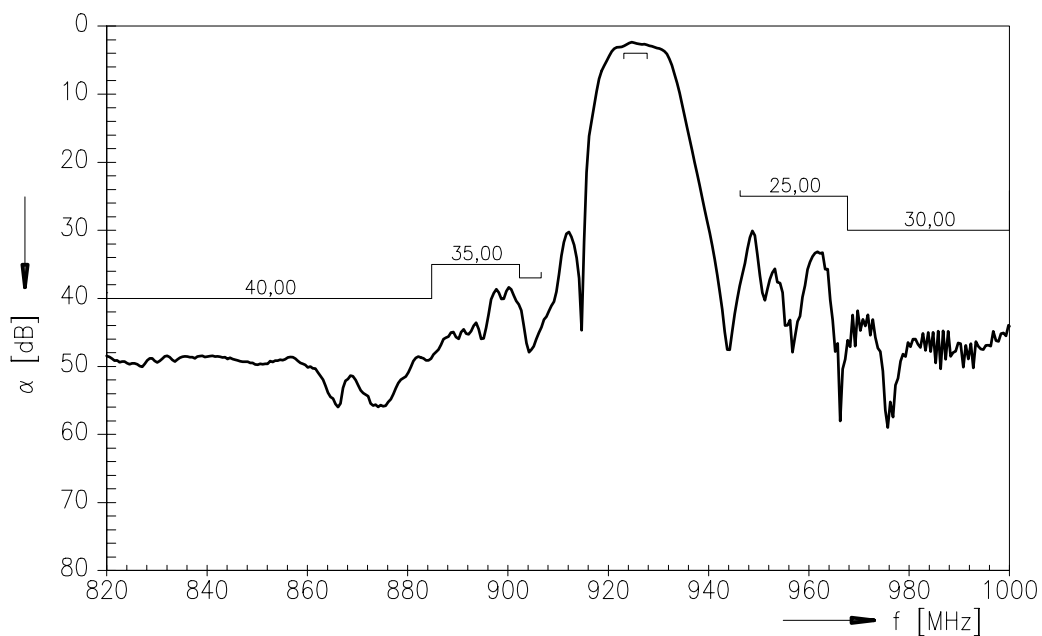
Data Sheet



Transfer function Tx (Narrowband):



Transfer function Rx (Narrowband):





SAW Components

B4068

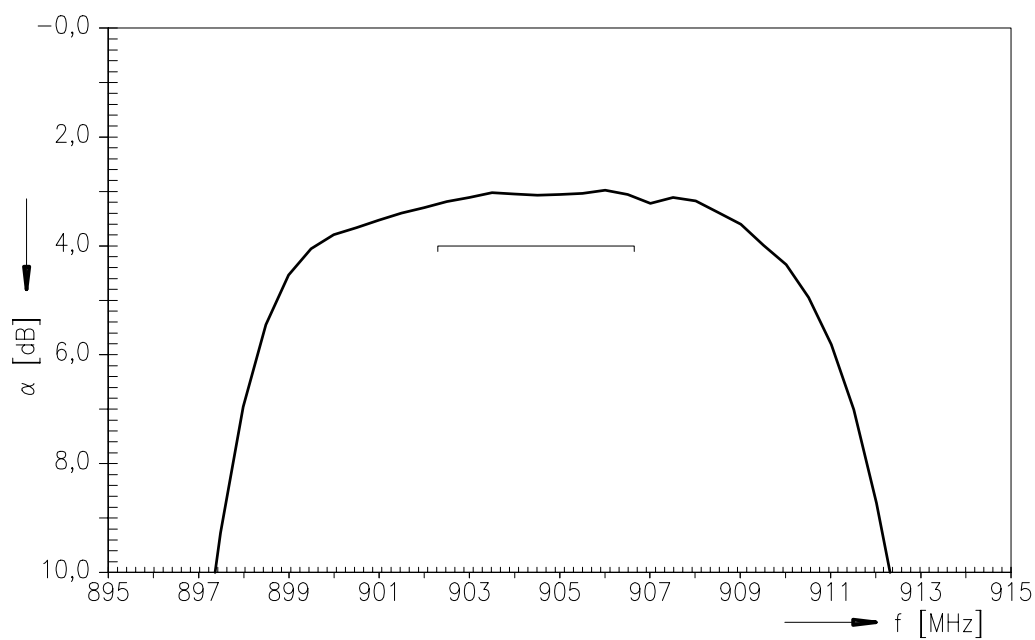
Low-Loss Filter for Mobile Communication

904,5 / 925,5 MHz

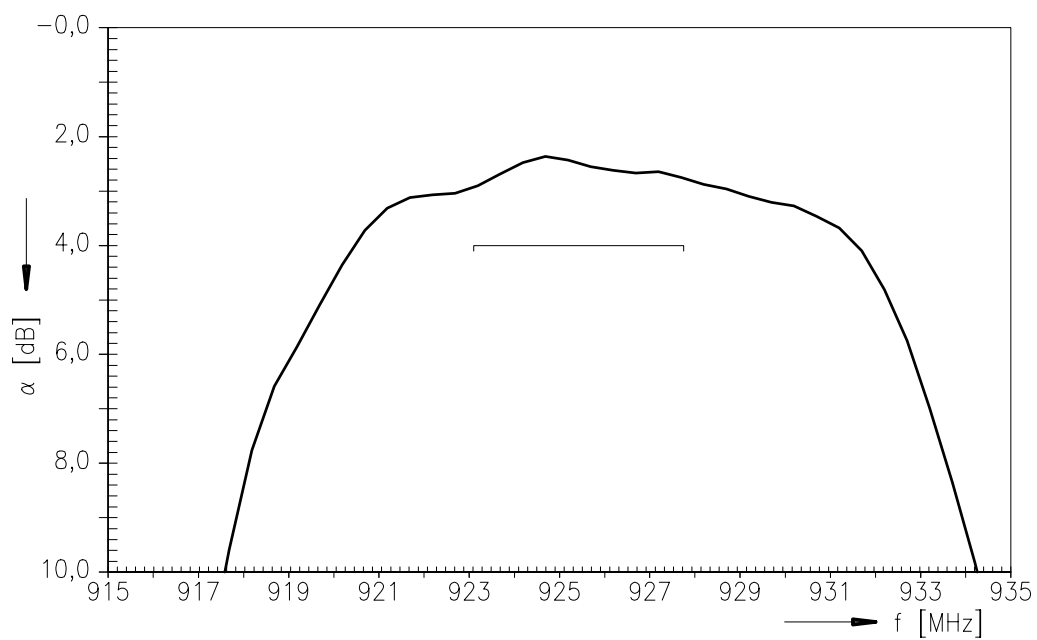
Data Sheet



Transfer function Tx (Passband):



Transfer function Rx (Passband):





SAW Components

B4068

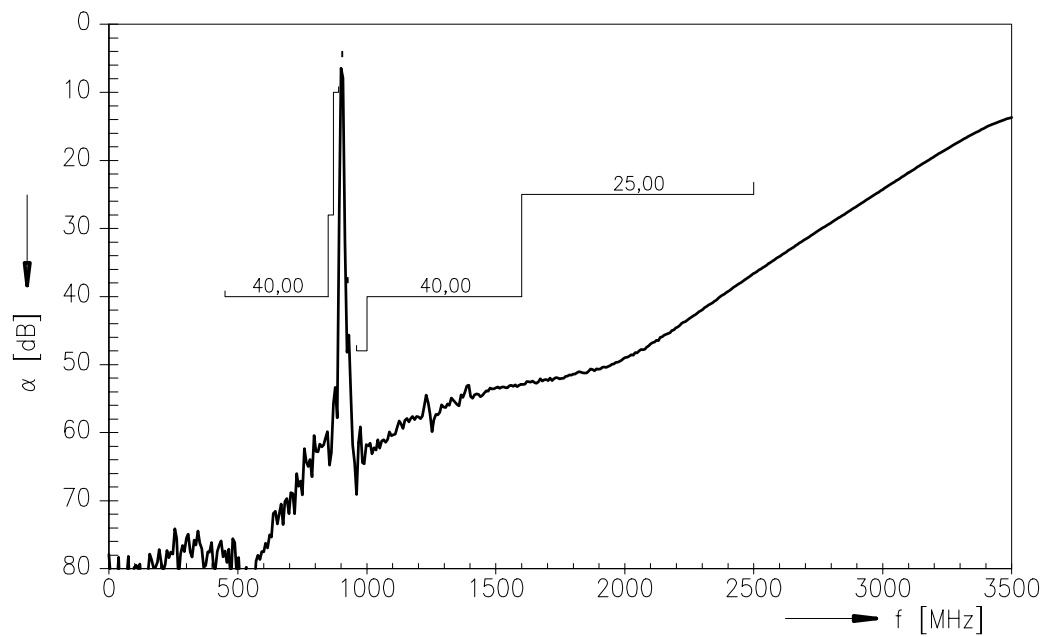
Low-Loss Filter for Mobile Communication

904,5 / 925,5 MHz

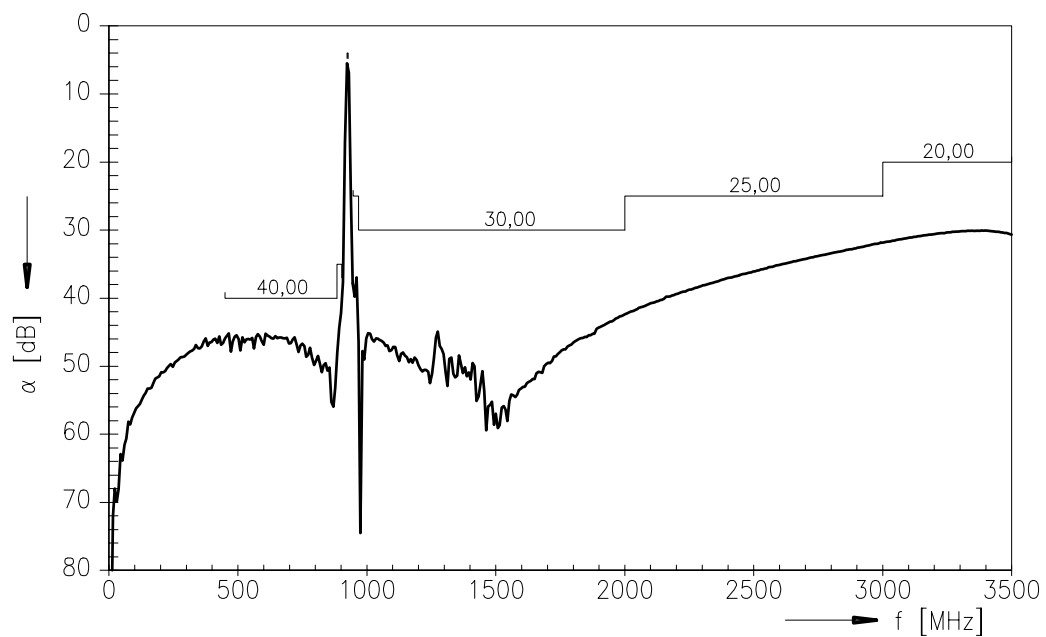
Data Sheet



Transfer function Tx (Wideband):

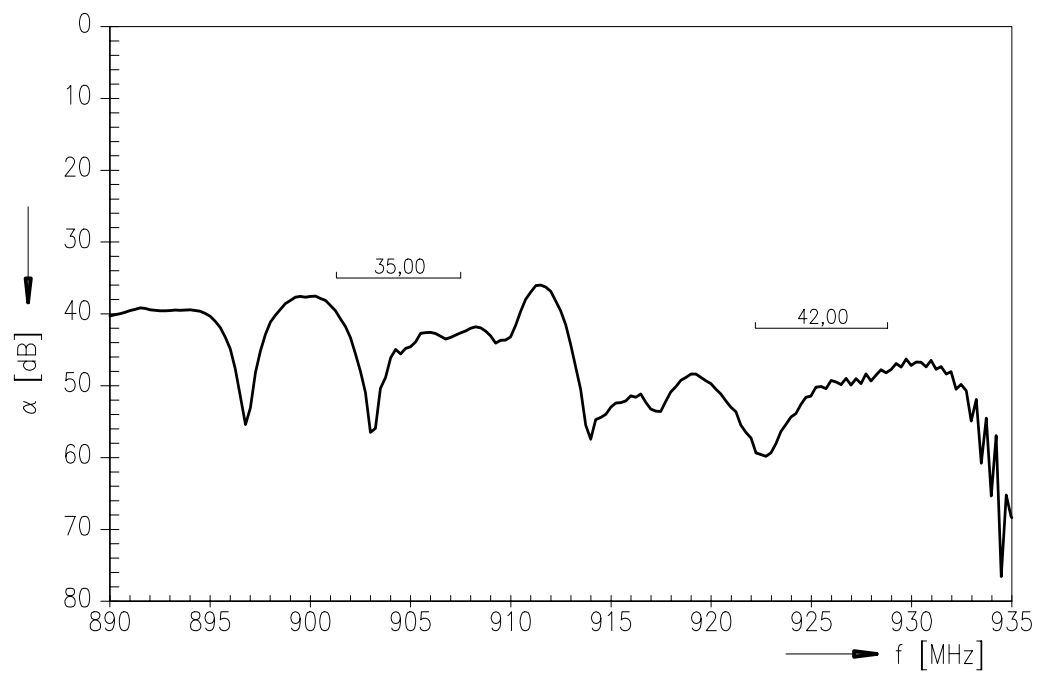


Transfer function Rx (Wideband):



**SAW Components****B4068****Low-Loss Filter for Mobile Communication****904,5 / 925,5 MHz****Data Sheet****Isolation between Tx and Rx**Operating temperature range $T = -10$ to $55\text{ }^{\circ}\text{C}$ Ant term. impedance $Z_{\text{Ant}} = 50\ \Omega$ Port 1 term. impedance $Z_{\text{Port 1}} = 50\ \Omega$ Port 2 term. impedance $Z_{\text{Port 2}} = 50\ \Omega$

		min.	typ.	max.	
Absolute attenuation	α				
	902,30 ... 906,65 MHz	35	37	—	dB
	923,10 ... 927,75 MHz	42	46	—	dB

Isolation between Tx and Rx:



SAW Components

B4068

Low-Loss Filter for Mobile Communication

904,5 / 925,5 MHz

Data Sheet



Published by EPCOS AG

Surface Acoustic Wave Components Division, SAW MC WT

P.O. Box 80 17 09, D-81617 München

© EPCOS AG 2002. All Rights Reserved. Reproduction, publication and dissemination of this brochure and the information contained therein without EPCOS' prior express consent is prohibited.

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.