



SAW Components

Data Sheet B5018





SAW Components

B5018

Low-Loss Filter

70,0 MHz

Data Sheet

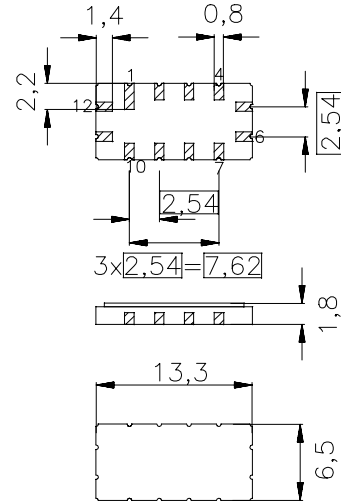
Features

- IF low-loss filter for CDMA base station
- Usable bandwidth 5 MHz
- Balanced or unbalanced operation possible
- Ceramic SMD package
- RoHS compliant

Terminals

- Gold plated

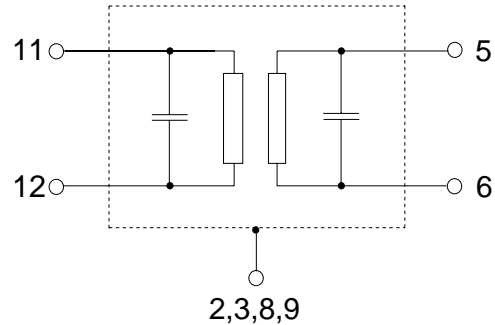
Ceramic package **QCC12**



Dimensions in mm, appr. weight 0,44 g

Pin configuration

- | | |
|-------------|----------------|
| 11 | Input |
| 12 | Input ground |
| 5 | Output |
| 6 | Output ground |
| 2, 3, 8, 9 | Case ground |
| 1, 4, 7, 10 | To be grounded |



Type	Ordering code	Marking and Package according to	Packing according to
B5018	B39700-B5018-Z510	C61157-A7-A55	F61074-V8163-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	0	dBm


SAW Components
B5018
Low-Loss Filter
70,0 MHz
Data Sheet
Characteristics

Operating temperature range: $T = -10 \dots 75 \text{ }^\circ\text{C}$
 Terminating source impedance: $Z_S = 50 \text{ } \Omega$ and matching network
 Terminating load impedance: $Z_L = 50 \text{ } \Omega$ and matching network

			min.	typ.	max.	
Nominal frequency	f_N		—	70,0	—	MHz
Minimum insertion attenuation	α_{\min}		—	8,9	9,5	dB
Passband width	$\alpha_{\text{rel}} \leq 1 \text{ dB}$	$B_{1\text{dB}}$	6,2	6,3	—	MHz
Passband width	$\alpha_{\text{rel}} \leq 3 \text{ dB}$	$B_{3\text{dB}}$	7,0	7,4	—	MHz
Bandwidth	$\alpha_{\text{rel}} \leq 40 \text{ dB}$	$B_{40\text{dB}}$	—	11,3	11,95	MHz
Amplitude ripple (p-p)	$f_N \pm 2,5 \text{ MHz}$	$\Delta\alpha$	—	0,5	1,0	dB
Absolute group delay (at f_N)		τ	—	1,08	—	μs
Group delay ripple (p-p)	$f_N \pm 2,5 \text{ MHz}$	$\Delta\tau$	—	70	125	ns
Phase ripple (p-p)	$f_N \pm 2,5 \text{ MHz}$	$\Delta\varphi$	—	5	8	$^\circ$
Phase ripple (rms)	$f_N \pm 2,5 \text{ MHz}$	$\Delta\varphi$	—	0,5	—	$^\circ$ rms
Relative attenuation (relative to α_{\min})		α_{rel}				
	$f_N - 20 \text{ MHz} \dots f_N - 7 \text{ MHz}$		40	43	—	dB
	$f_N + 7 \text{ MHz} \dots f_N + 20 \text{ MHz}$		40	46	—	dB
Temperature coefficient of frequency	TC_f		—	-87	—	ppm/K



SAW Components

B5018

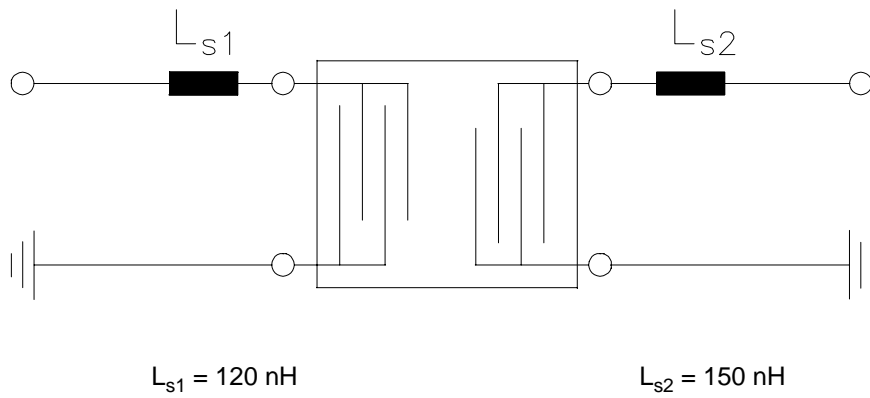
Low-Loss Filter

70,0 MHz

Data Sheet

Matching network to 50Ω

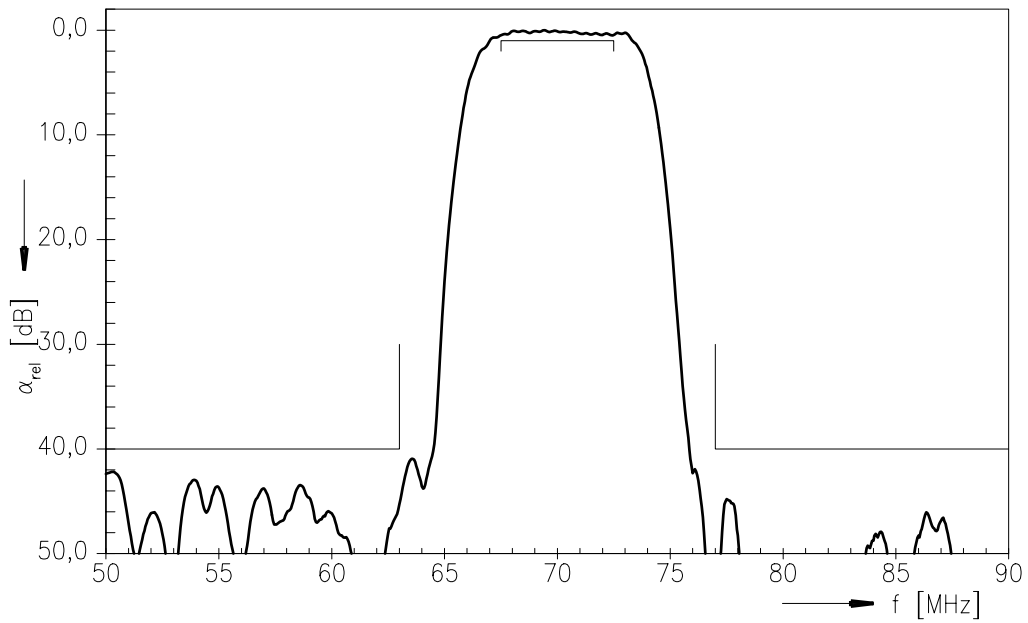
(Element values depend upon PCB layout)



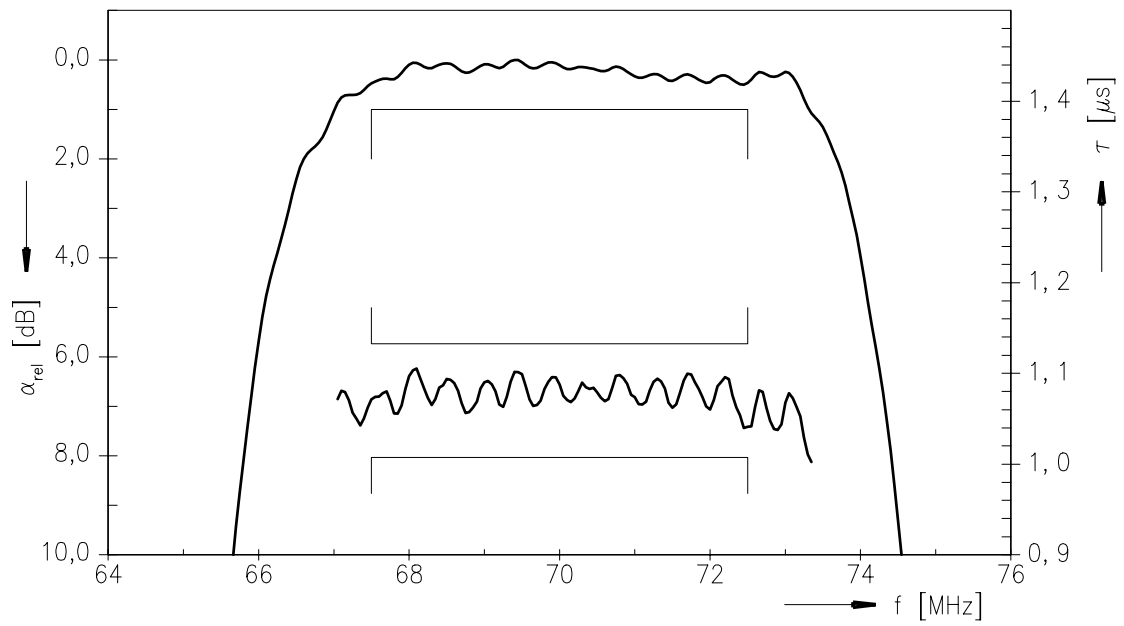


Data Sheet

Transfer function



Transfer function (pass band)





SAW Components

B5018

Low-Loss Filter

70,0 MHz

Data Sheet

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

© EPCOS AG 2005. 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.