



# SAW Components

Data Sheet B5018

Data Sheet

An abstract, grayscale graphic featuring a large, stylized, and slightly blurred "EPCOS" logo. The logo is set against a background of curved, overlapping bands and a faint world map, creating a sense of global connectivity and technological advancement.



## SAW Components

**B5018**

### Low-Loss Filter

**70,0 MHz**

#### Data Sheet

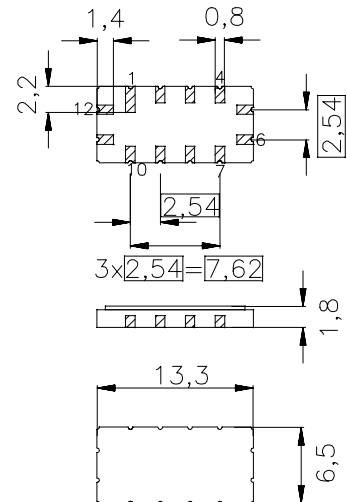
##### Features

- 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

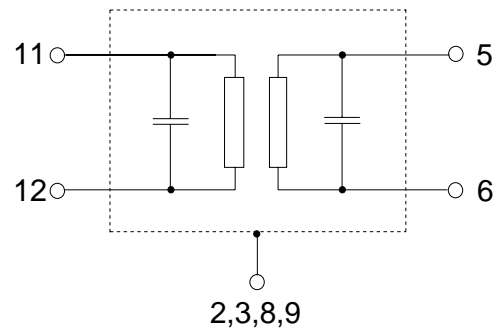
#### Ceramic package QCC12



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



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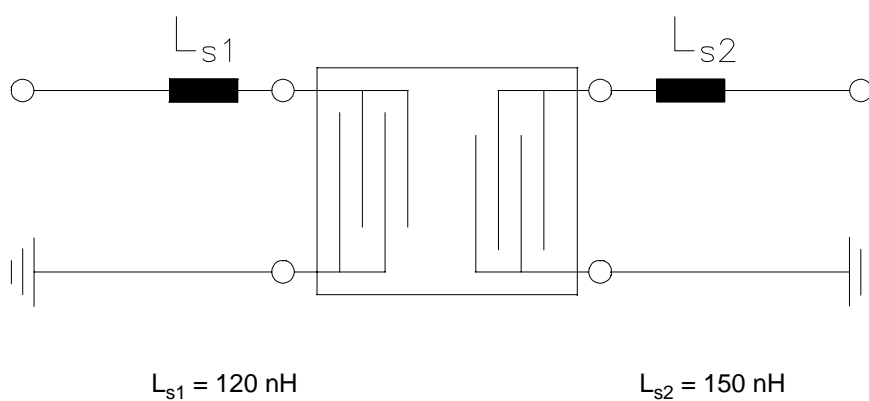
### Characteristics

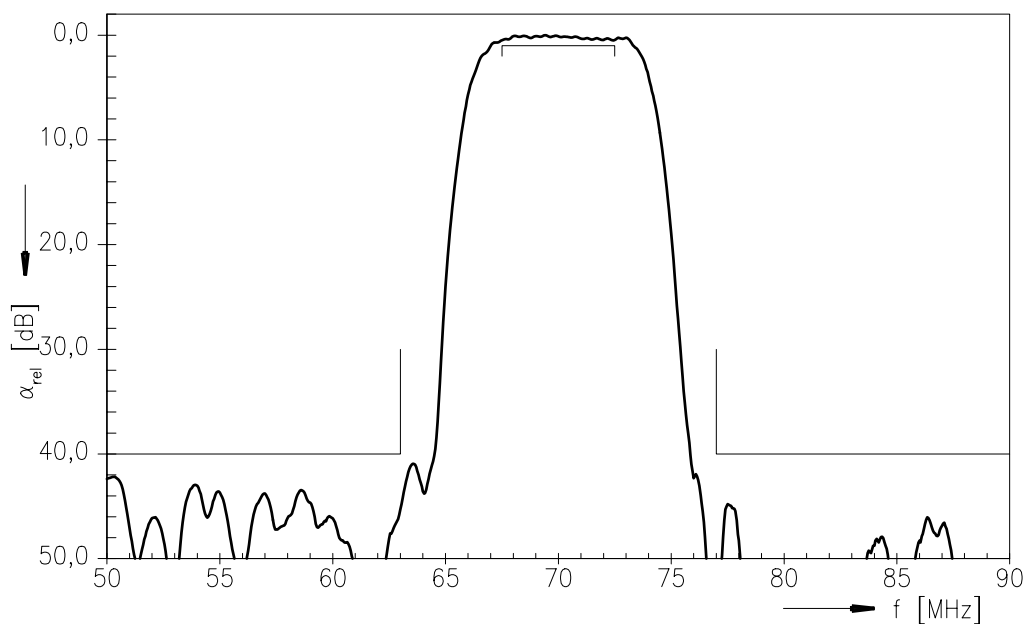
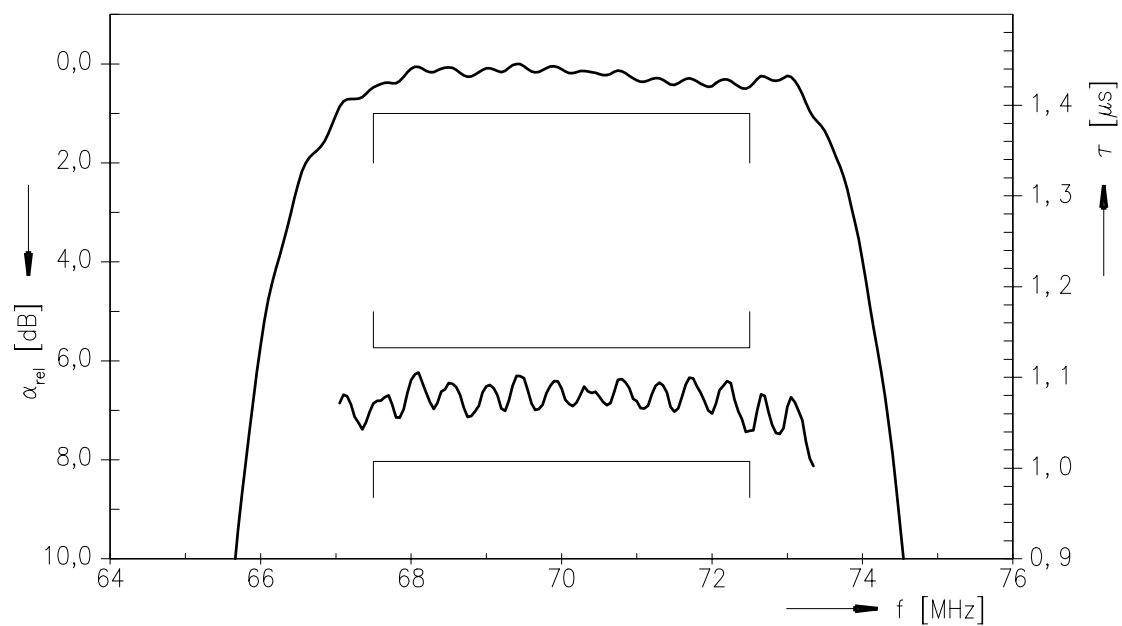
Operating temperature range:	$T = -10 \dots 75 \text{ }^{\circ}\text{C}$
Terminating source impedance:	$Z_S = 50 \text{ } \Omega$ and matching network
Terminating load impedance:	$Z_L = 50 \text{ } \Omega$ and matching network

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

**SAW Components****B5018****Low-Loss Filter****70,0 MHz****Data Sheet****Matching network to 50Ω**

(Element values depend upon PCB layout)



**SAW Components****B5018****Low-Loss Filter****70,0 MHz****Data Sheet****Transfer function****Transfer function (pass band)**



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**Data Sheet**

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