



# *SAW Components*

*Data Sheet B3625*

Data Sheet

A large, stylized, 3D-rendered graphic of the EPCOS logo. The letters "EPCOS" are rendered in a white, glowing, sans-serif font, appearing to be part of a larger, curved structure that resembles the company's logo. The background is dark and textured, with a faint map of the world visible.



SAW Components

B3625

Low-Loss Filter

71,00 MHz

Data Sheet

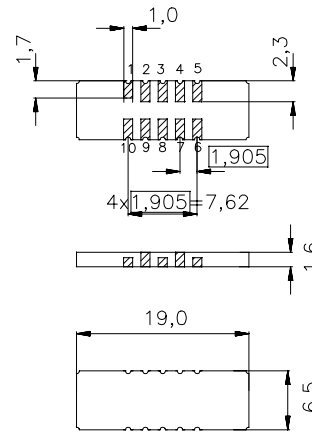
Ceramic package **DCC18**

Features

- Low-loss IF filter for basestation
- Channel selection in GSM systems
- Hermetically sealed ceramic SMD package

Terminals

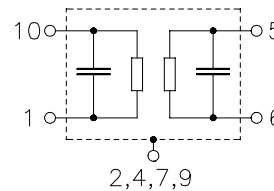
- Gold plated



Dim. in mm, aprox. weight 0,8 g

Pin configuration

- 10,1      Input
- 5,6      Output
- 3,8      Ground
- 2,4,7,9      Case – ground



Type	Ordering code	Marking and Package according to	Packing according to
B3625	B39710-B3625-U210	C61157-A7-A54	F61074-V8069-Z000

Electrostatic Sensitive Device (ESD)

Maximum ratings

Operable temperature range	$T$	- 30/+ 85	°C	
Storage temperature range	$T_{stg}$	- 30/+ 85	°C	
DC voltage	$V_{DC}$	0	V	
Source power	$P_s$	10	dBm	



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**Characteristics**

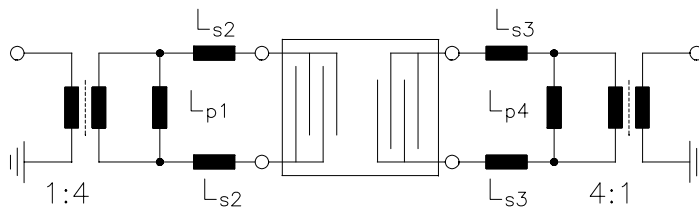
Operating temperature:  $T = 0 - 70\text{ }^{\circ}\text{C}$   
 Terminating source impedance:  $Z_S = 200\ \Omega$  unbalanced and matching network  
 Terminating load impedance:  $Z_L = 200\ \Omega$  unbalanced and matching network

		min.	typ.	max.	
<b>Nominal frequency</b>	$f_N$	—	71,0	—	MHz
<b>Minimum insertion attenuation</b> (including matching network)	$\alpha_N$	—	7,0	8,0	dB
<b>Passband width</b> $\alpha_{rel} \leq 1\text{ dB}$	$B_{1,0dB}$	—	0,21	—	MHz
<b>Amplitude ripple in passband</b> 70,92 ... 71,08 MHz	$\Delta\alpha$	—	$\pm 0,6$	$\pm 1,0$	dB
<b>Absolute group delay</b>	$\tau$	2,35	2,50	2,65	$\mu\text{s}$
<b>Group delay ripple (p-p)</b> 70,92 ... 71,08 MHz	$\Delta\tau$	—	0,45	1,5	$\mu\text{s}$
<b>Relative attenuation (relative to <math>\alpha_N</math>)</b>	$\alpha_{rel}$				
$f_N \pm 200\text{ kHz} \dots f_N \pm 300\text{ kHz}$		3	—	—	dB
$f_N \pm 300\text{ kHz} \dots f_N \pm 400\text{ kHz}$		13	—	—	dB
$f_N \pm 400\text{ kHz} \dots f_N \pm 700\text{ kHz}$		23	—	—	dB
$f_N \pm 700\text{ kHz} \dots f_N \pm 1600\text{ kHz}$		31	—	—	dB
$\quad\quad\quad @ f_N \pm 800\text{ kHz}$		34	—	—	dB
$f_N \pm 1600\text{ kHz} \dots f_N \pm 6000\text{ kHz}$		35	—	—	dB
$f_N \pm 6000\text{ kHz} \dots f_N \pm 35000\text{ kHz}$		40	—	—	dB
<b>IM3 level (Input level -14 dBm)</b>					
$f_N \pm 800\text{ kHz}$		—	—	-95	dBm
$f_N \pm 1600\text{ kHz}$		—	—	-95	dBm
<b>Temperature coefficient of frequency <sup>1)</sup></b>	$TC_f$	—	-0,033	—	ppm/K <sup>2</sup>
<b>Turnover temperature</b>	$T_0$	—	10	—	$^{\circ}\text{C}$

<sup>1)</sup> Temperature dependence of  $f_c$ :  $f_c(T_A) = f_c(T_0)(1 + TC_f(T_A - T_0)^2)$



Matching network:

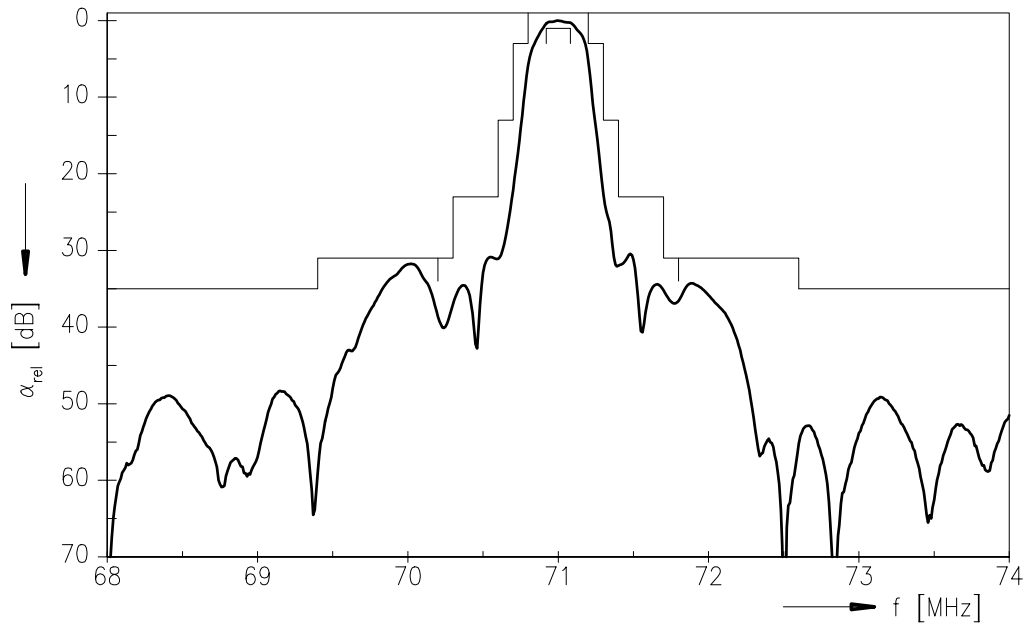


- Lp1=120 nH
- Ls2=120 nH
- Ls3=220 nH
- Lp4=180 nH

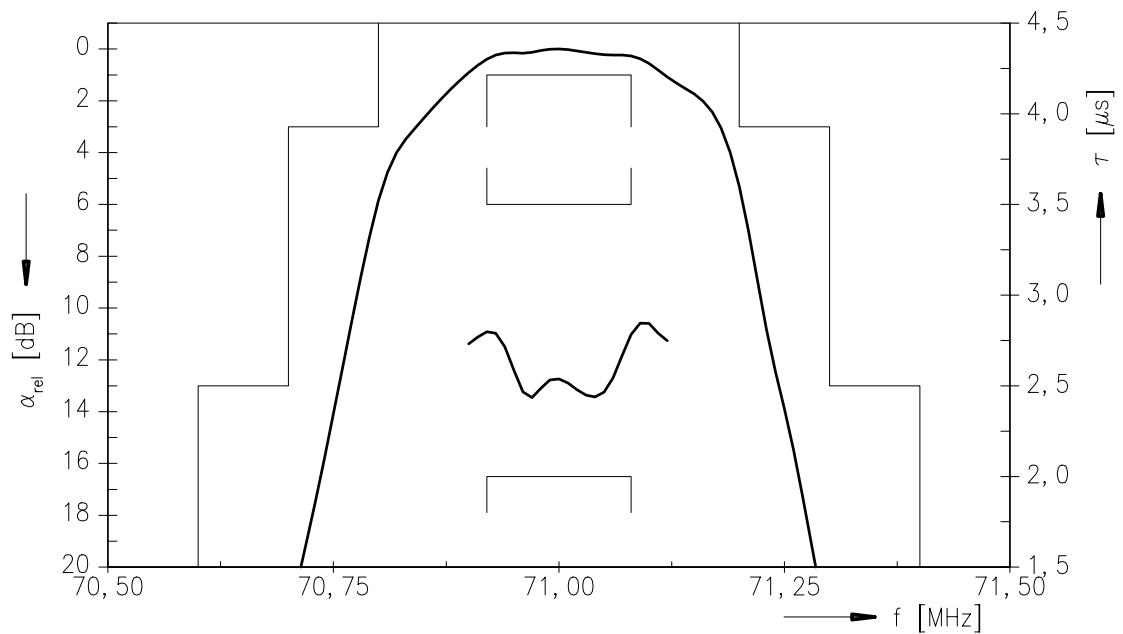


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Normalized frequency response



Normalized frequency response (pass band)





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