



# SAW Components

Data Sheet B 8110 L





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Bandpass Filter

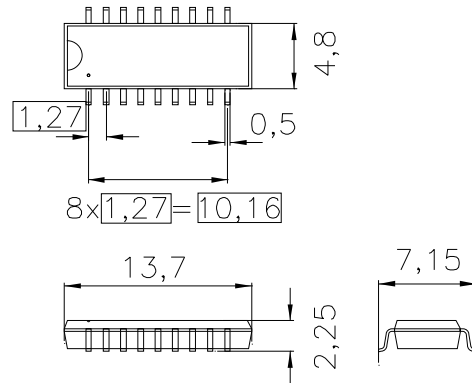
110,59 MHz

Data Sheet

duroplast package **DIP18D**

Features

- IF filter for cordless application
- Channel selection in DECT system
- Low group delay ripple
- **Surface Mounted Technology (SMT)**
- Standard IC small outline (SO) package
- Balanced and unbalanced operation possible
- no matching required on 50  $\Omega$



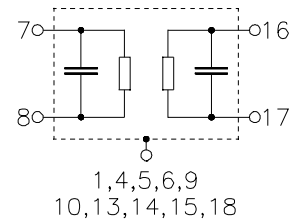
Terminals

- Tinned CuFe alloy

Dimensions in mm, approx. weight 0,5 g

Pin configuration

- 7 Input
- 8 Input ground or balanced input
- 16 Output
- 17 Output ground or balanced output
- 1,4,5,6,9,10,13,14,15,18 Chip carrier – ground
- 2,3,11,12 not connected



Type	Ordering code	Marking and Package according to	Packing according to
B8110L	B39111-B8110-L100	C61157-A2-A4	F61074-V8058-Z000

Electrostatic Sensitive Device (ESD)

Maximum ratings

Operable temperature range	$T_A$	-40/+65	$^{\circ}\text{C}$	
Storage temperature range	$T_{\text{stg}}$	-40/+85	$^{\circ}\text{C}$	
DC voltage	$V_{\text{DC}}$	0	V	
Source power	$P_s$	10	dBm	



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**Characteristics**

Reference temperature:  $T = +25\text{ }^{\circ}\text{C}$   
 Terminating source impedance:  $Z_S = 50\ \Omega$   
 Terminating load impedance:  $Z_L = 50\ \Omega$

		min.	typ.	max.	
<b>Nominal frequency</b>	$f_N$	—	110,59	—	MHz
<b>Center frequency</b> (center frequency between 10 dB points)	$f_c$	110,51	110,59	110,67	MHz
<b>Minimum insertion attenuation</b>	$\alpha_{\min}$	—	16,5	17,5	dB
<b>Passband width</b>	$B_{3\text{dB}}$	—	1,15	—	MHz
	$B_{30\text{dB}}$	—	2,57	—	MHz
<b>Group delay ripple (p-p)</b> $f_N - 600\text{ kHz} \quad \dots \quad f_N + 600\text{ kHz}$	$\Delta\tau$	—	180	250	ns
<b>Relative attenuation (relative to <math>\alpha_N</math>)</b>	$\alpha_{\text{rel}}$				
$f_N \pm 1,6\text{ MHz} \quad \dots \quad f_N \pm 3,1\text{ MHz}$		32	36	—	dB
$f_N \pm 3,1\text{ MHz} \quad \dots \quad f_N \pm 4,6\text{ MHz}$		40	52	—	dB
$f_N \pm 4,6\text{ MHz} \quad \dots \quad f_N \pm 20\text{ MHz}$		45	57	—	dB
$f_N \pm 1,728\text{ MHz}$		32	37	—	dB
$f_N \pm 2 \times 1,728\text{ MHz}$		42	57	—	dB
$f_N \pm 3 \times 1,728\text{ MHz}$		48	63	—	dB
<b>Impedance in pass band</b>					
Input: $Z_{\text{IN}} = R_{\text{IN}} \parallel C_{\text{IN}}$		—	850 $\parallel$ 6,8	—	$\Omega \parallel \text{pF}$
Output: $Z_{\text{OUT}} = R_{\text{OUT}} \parallel C_{\text{OUT}}$		—	100 $\parallel$ 25	—	$\Omega \parallel \text{pF}$
<b>Temperature coefficient of frequency</b>	$TC_f$	—	- 18	—	ppm/K



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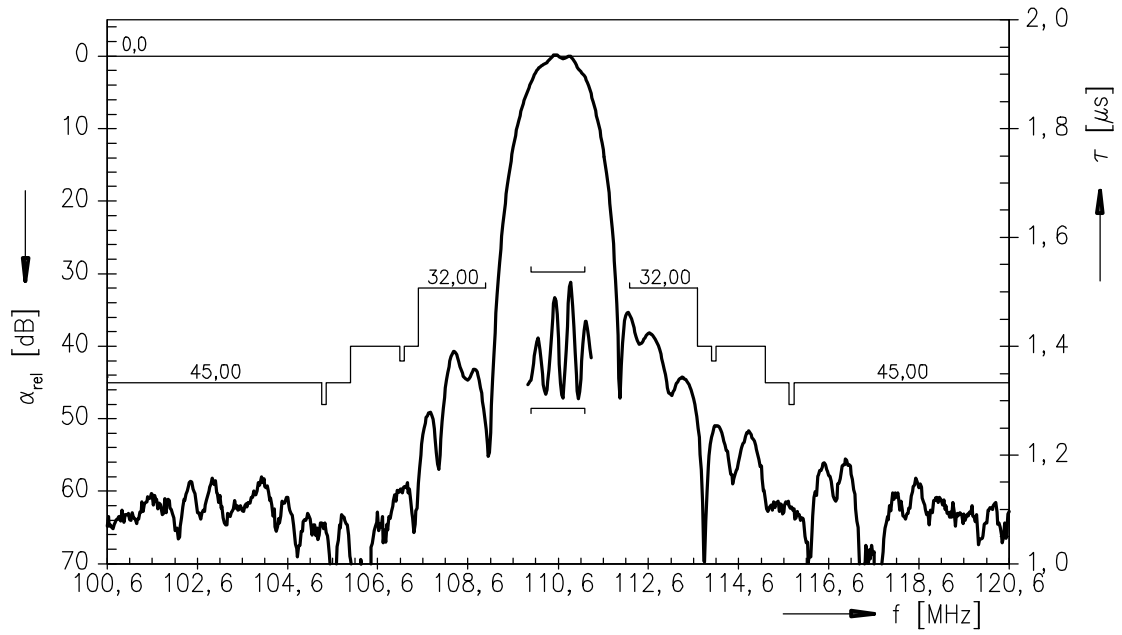
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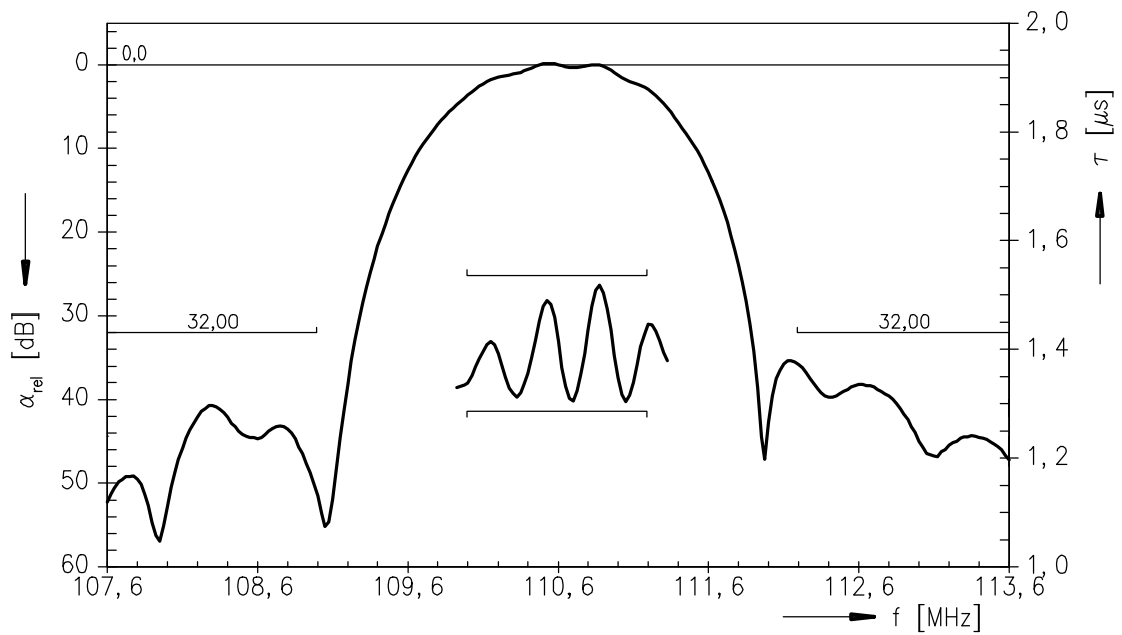
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Transfer function:



Transfer function (pass band):





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