



SAW Components

Data Sheet X 7001 L





SAW Components

X 7001 L

IF Bandpass Filter

30,72 MHz

Data Sheet

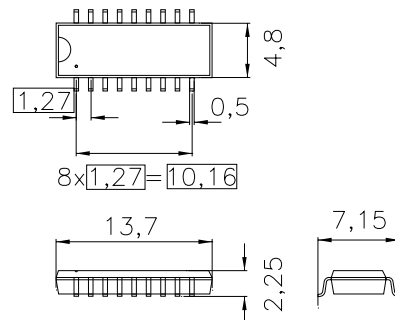
Duroplast package DIP18D

Features

- IF filter for Digital Audio Broadcasting
- Constant group delay
- Surface Mounted Technology (SMT)
- Standard IC small outline (SO) package

Terminals

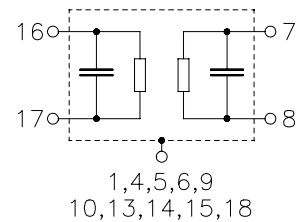
- Tinned CuFe alloy



Dimensions in mm, approx. weight 0,5 g

Pin configuration

- 16,17 Input
- 7,8 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
X 7001 L	B39307-X7001-L100	C61157-A2-A4	F61074-V8058-Z000

Maximum ratings

Operable temperature range	T_A	-40/+85	°C	
Storage temperature range	T_{stg}	-40/+85	°C	
DC voltage	V_{DC}	0	V	between any terminals
AC voltage	V_{pp}	10	V	between any terminals



SAW Components	X 7001 L
IF Bandpass Filter	30,72 MHz

Data Sheet

Characteristics

Reference temperature: $T_A = 25\text{ °C}$
 Terminating source impedance: $Z_S = 150\ \Omega$
 Terminating load impedance: $Z_L = 1\text{ k}\Omega$

		min.	typ.	max.	
Center frequency (center between 3 dB points)	f_C	—	30,72	—	MHz
Insertion attenuation Reference level for the following data	α 30,72 MHz	19,3	20,8	22,3	dB
Pass bandwidth					
$\alpha_{rel} \leq 3\text{ dB}$	B_{3dB}	—	1,6	—	MHz
$\alpha_{rel} \leq 20\text{ dB}$	B_{20dB}	—	2,4	—	MHz
$\alpha_{rel} \leq 30\text{ dB}$	B_{30dB}	—	2,6	—	MHz
Relative attenuation	α_{rel}				
Lower sidelobe	22,00 ... 27,92 MHz	40,0	47,0	—	dB
	27,92 ... 28,82 MHz	37,0	44,0	—	dB
Lower sidelobe	32,62 ... 42,00 MHz	40,0	47,0	—	dB
Reflected wave signal suppression 1,6 μ s ... 6,0 μ s after main pulse (test pulse 250 ns, carrier frequency 30,72 MHz)		38,0	45,0	—	dB
Group delay ripple (p-p)	$\Delta\tau$				
Aperture 50 kHz	29,95 ... 31,49 MHz	—	50	—	ns
Impedance at 30,72 MHz					
Input: $Z_{IN} = R_{IN} \parallel C_{IN}$		—	2,0 \parallel 19,8	—	k Ω \parallel pF
Output: $Z_{OUT} = R_{OUT} \parallel C_{OUT}$		—	2,5 \parallel 10,1	—	k Ω \parallel pF
Temperature coefficient of frequency	TC_f	—	-18	—	ppm/K



SAW Components

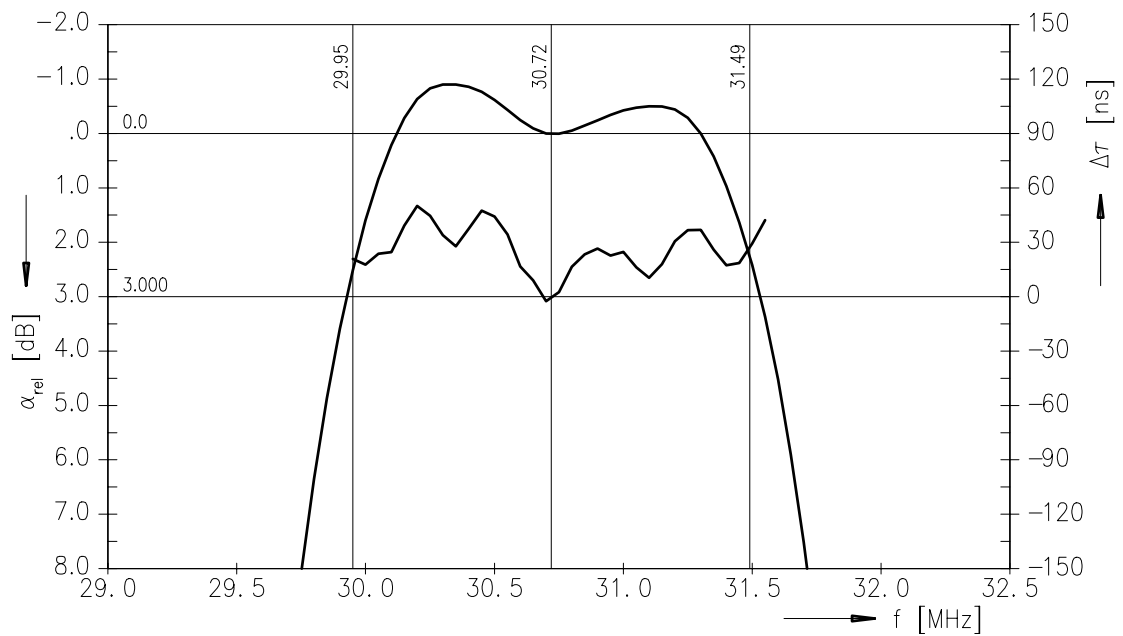
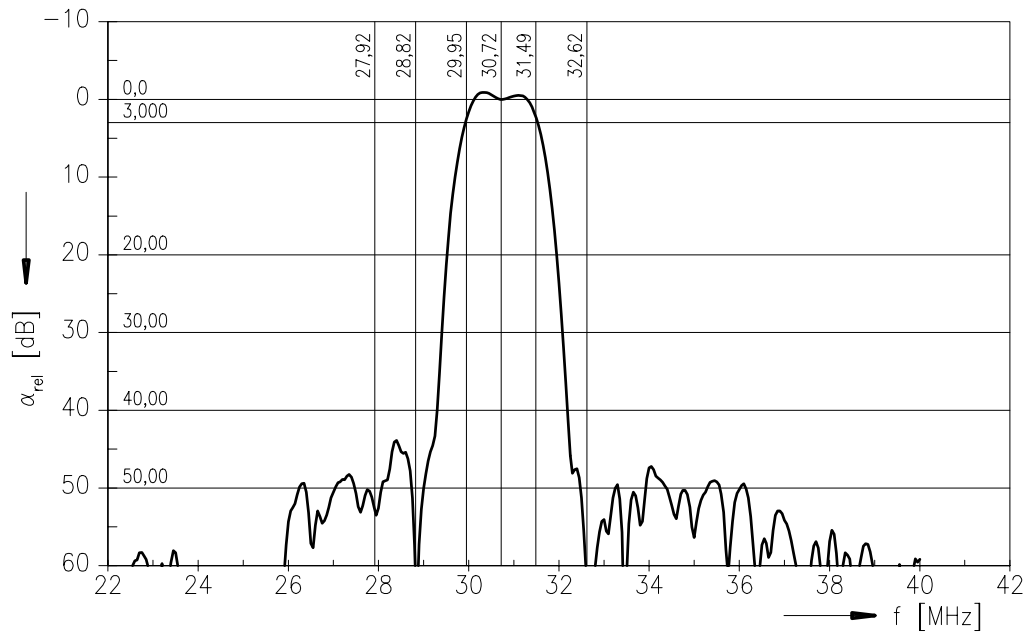
X 7001 L

IF Bandpass Filter

30,72 MHz

Data Sheet

Frequency response





SAW Components

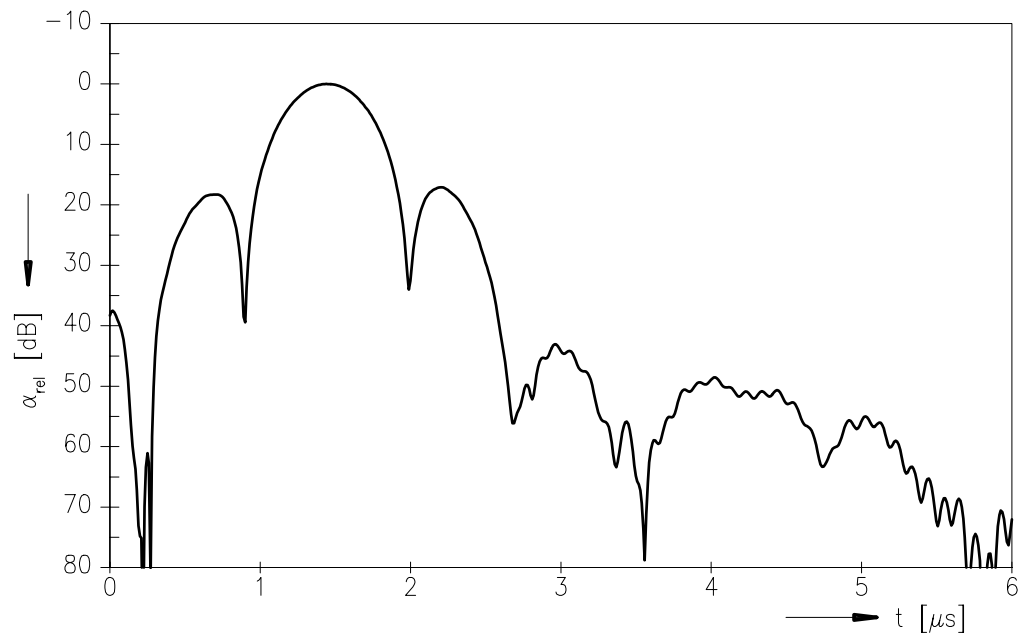
X 7001 L

IF Bandpass Filter

30,72 MHz

Data Sheet

Time domain response





SAW Components	X 7001 L
IF Bandpass Filter	30,72 MHz

Data Sheet

Published by EPCOS AG
Surface Acoustic Wave Components Division, SAW CE MM PD
P.O. Box 80 17 09, D-81617 München

© EPCOS AG 2001. All Rights Reserved.

As far as patents or other rights of third parties are concerned, liability is only assumed for components per se, not for applications, processes and circuits implemented within components or assemblies.

The information describes the type of component and shall not be considered as assured characteristics.

Terms of delivery and rights to change design reserved.

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.