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# SAW Components

Data Sheet





## SAW Components X 7303 P Bandpass Filter 44,00 MHz

**Data Sheet** 

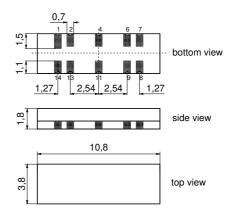
#### 

#### Standard

■ HDTV

#### **Features**

- Constant group delay
- Optimized for cascade of two devices
- Unbalanced input option
- Surface Mounted Technology (SMT)



Polymer package DOC14A

#### **Terminals**

■ Gold plated

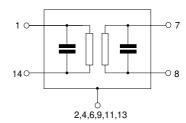
Dimensions in mm, approx. weight 0,14 g

#### Pin configuration

1 Input14 Input

4,9,11,13 Case - ground

2,6 Ground7 Output8 Output



Туре	Ordering code	Marking and package according to	Packing according to		
X 7303 P	B39440-X7303-P200	C61157-A5-A1	F61074-V8188-Z000		

#### **Maximum ratings**

Operable temperature range	$T_{A}$	-25/+65	°C	
Storage temperature range	$T_{ m stg}$	-40/+85	°C	
DC voltage	$V_{DC}$	0	V	between any terminals
AC voltage	$V_{\sf pp}$	10	V	between any terminals



SAW Components X 7303 P

44,00 MHz **Bandpass Filter** 

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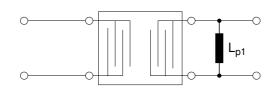
#### **Characteristics**

Reference temperature: Terminating source impedance:

 $T_{\rm A} = 25~^{\circ}{\rm C}$   $Z_{\rm S} = 50~\Omega$   $Z_{\rm L} = 2~{\rm k}\Omega~{\rm ||}~3~{\rm pF}$  and matching network Terminating load impedance:

					min.	typ.	max.	
Insertion attenuation				α				
Reference level for the		44,00	MHz		18,0	19,5	21,0	dB
following data								
Amplitude ripple (p-p)				$\Delta \alpha$				
	41,60	46,40	MHz		_	1,0	_	dB
Relative attenuation				$\alpha_{\text{rel}}$				
		40,75	MHz		22,0	28,0	_	dB
		41,35	MHz		0,9	1,9	2,9	dB
		41,60			-0,7	0,3	1,3	dB
		46,40			-1,0	0,0	1,0	dB
		46,65			0,9	1,9	2,9	dB
		47,25	MHz		22,0	29,0	_	dB
Lower sidelobe	35,00	39,50	MHz		28,0	34,0	_	dB
	39,50	40,20	MHz		29,0	35,0	_	dB
Upper sidelobe	47,65				24,0	29,0	_	dB
	48,50	55,00	MHz		29,0	35,0	<u> </u>	dB
Reflected wave signal suppression								
1,5 μs 6,0 μs after ma	in pulse				42,0	54,0	_	dB
(test pulse 250 ns,								
carrier frequency 44,00	MHz)							
Group delay ripple (p-p)				Δτ				
	<sup>^</sup> 41,35	46,65	MHz		_	70	_	ns
Impedance at 44,00 MHz								
Input: $Z_{IN} = R_{IN} \mid\mid C_{IN}$				-	3,6    14,7	_	$k\Omega \mid\mid pF$	
Output	$Z_{OUT} = R_{C}$	$C_{\text{OUT}} \parallel C_{0}$	TUC		_	8,8    4,3	_	$k\Omega \parallel pF$
Temperature coefficient of frequency				$TC_{f}$	_	-18	_	ppm/K

Matching network:



 $L_{p1} = 1800 \text{ nH}$ 

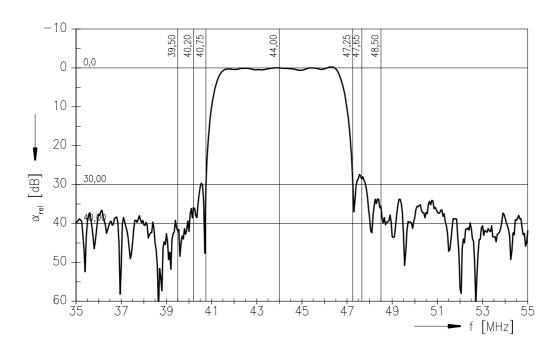


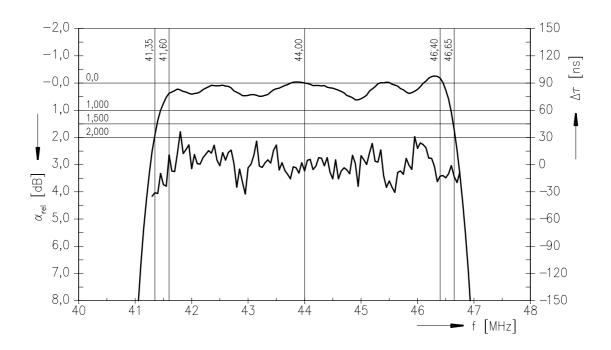
SAW Components X 7303 P
Bandpass Filter 44,00 MHz

**Data Sheet** 



#### Frequency response







SAW Components X 7303 P

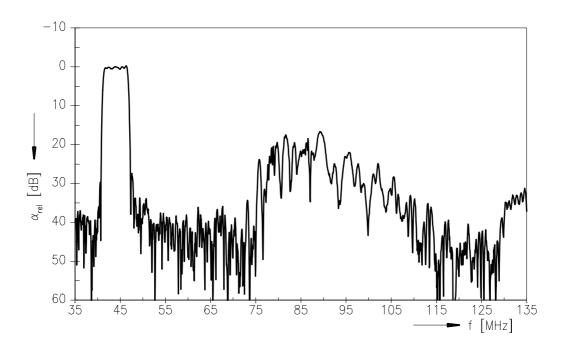
**Bandpass Filter** 

44,00 MHz

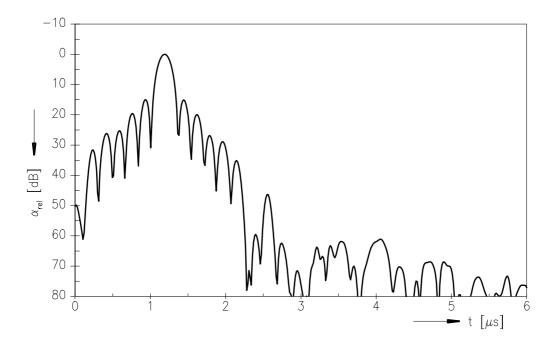
**Data Sheet** 



#### Frequency response



#### Time domain response





**SAW Components** X 7303 P 44,00 MHz **Bandpass Filter** 

**Data Sheet** 

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