



SAW multimedia filters

Series/Type: X6793D

The following products presented in this data sheet are being withdrawn.

Ordering Code	Substitute Product	Date of Withdrawal	Deadline Last Orders	Last Shipments
B39440X6793N201		2011-01-14	2011-09-30	2012-09-30

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SAW Components

X 6793 D

SAW bandpass filter

44.00 MHz

Data Sheet

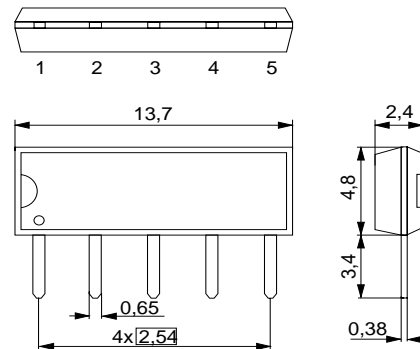
Application

- Standard: ATSC
- Usable bandwidth 5.6 MHz
- Constant group delay
- Suitable for single use and cascade of two device
- Balanced input option



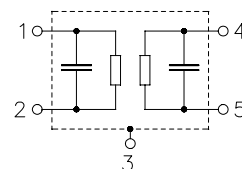
Features

- Duroplast package **SIP5D**
- Approximate weight 0.5 g
- Standard IC package
- RoHS compatible
- Tinned CuFe alloy terminals



Pin configuration

- 1 Input
- 2 Input - ground
- 3 Chip carrier - ground
- 4 Output
- 5 Output



Please read *cautions and warnings and important notes* at the end of this document.


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Characteristics

Reference temperature: $T_A = 25 (45) \text{ }^\circ\text{C}$
 Terminating source impedance: $Z_S = 50 \text{ } \Omega$
 Terminating load impedance: $Z_L = 2 \text{ k}\Omega \parallel 3 \text{ pF}$

	min.	typ. @ 25 °C	max.	
Insertion attenuation α				
Reference level for 44.06 (44.00) MHz the following data	17.3	18.8	20.3	dB
Amplitude ripple (p-p) $\Delta\alpha$				
41.81 ... 46.06 (41.75 ... 46.00) MHz	—	1.5	—	dB
Relative attenuation α_{rel}				
39.81 (39.75) MHz	28.0	35.0	—	dB
41.06 (41.00) MHz	1.6	3.1	4.6	dB
46.75 (46.69) MHz	0.9	2.4	3.9	dB
47.06 (47.00) MHz	7.0	9.0	—	dB
47.31 (47.25) MHz	17.0	23.0	—	dB
Lower sidelobe				
35.06 ... 37.06 (35.00 ... 37.00) MHz	34.0	38.0	—	dB
37.06 ... 39.41 (37.00 ... 39.35) MHz	29.0	34.0	—	dB
Upper sidelobe				
47.71 ... 50.76 (47.65 ... 50.70) MHz	20.0	27.0	—	dB
50.76 ... 55.06 (50.00 ... 55.00) MHz	30.0	36.0	—	dB
Reflected wave signal suppression				
1.2 μs ... 6.0 μs after main pulse (test pulse 250 ns, carrier frequency 44.06 MHz)	42.0	54.0	—	dB
Group delay ripple (p-p) $\Delta\tau$				
41.37 ... 46.75 (41.31 ... 46.69) MHz	—	50	—	ns
Impedance at 44.06 MHz				
Input: $Z_{IN} = R_{IN} \parallel C_{IN}$	—	2.1 \parallel 8.9	—	k Ω \parallel pF
Output: $Z_{OUT} = R_{OUT} \parallel C_{OUT}$	—	7.0 \parallel 2.0	—	k Ω \parallel pF
Temperature coefficient of frequency TC_f	—	-72	—	ppm/K



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Maximum ratings

Operable temperature range	T	-25 / +65	°C	
Storage temperature range	T _{stg}	-40 / +85	°C	
DC voltage	V _{DC}	5	V	between any terminals
AC voltage	V _{pp}	10	V	between any terminals



SAW Components

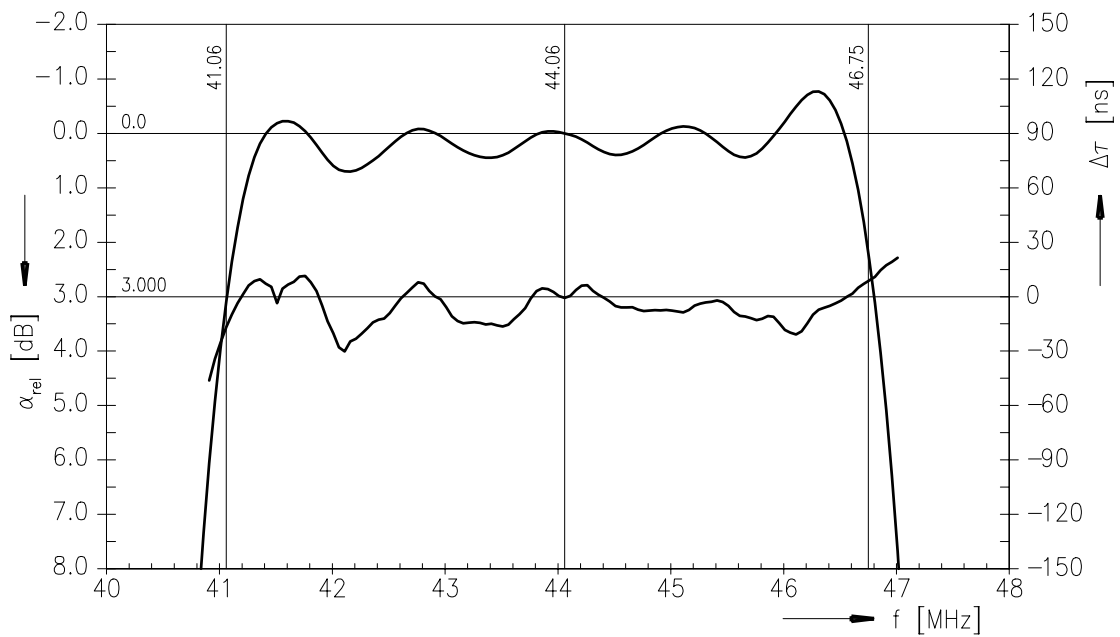
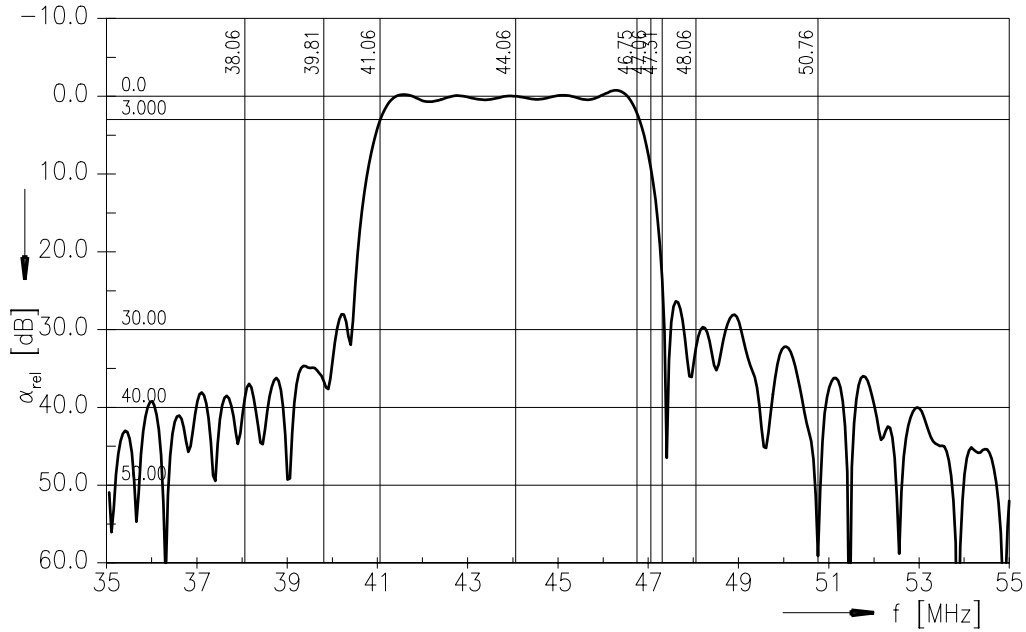
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44.00 MHz

Data Sheet

Frequency response



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SAW Components

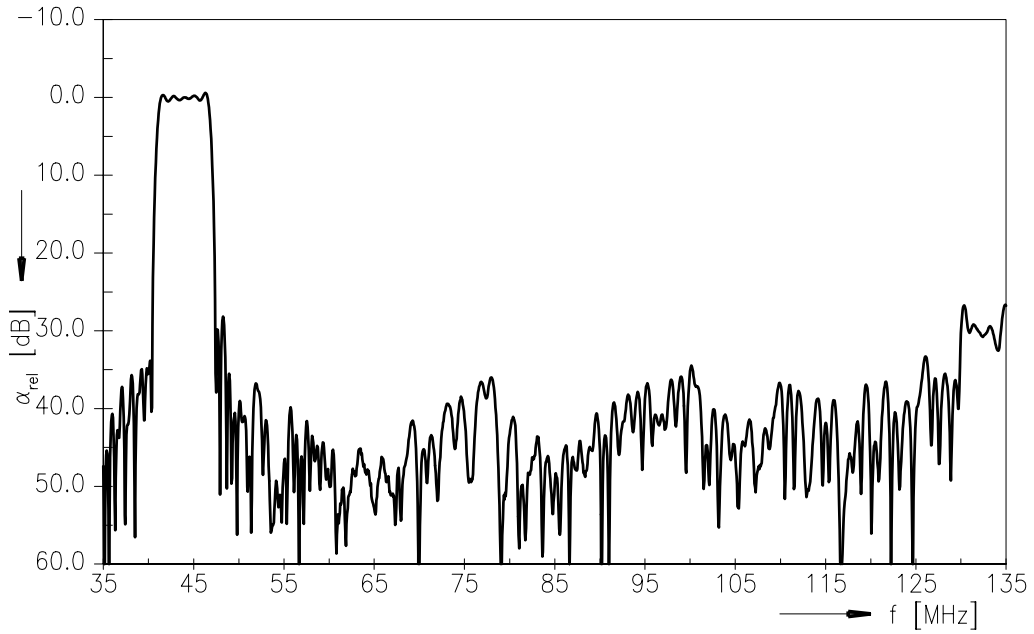
X 6793 D

SAW bandpass filter

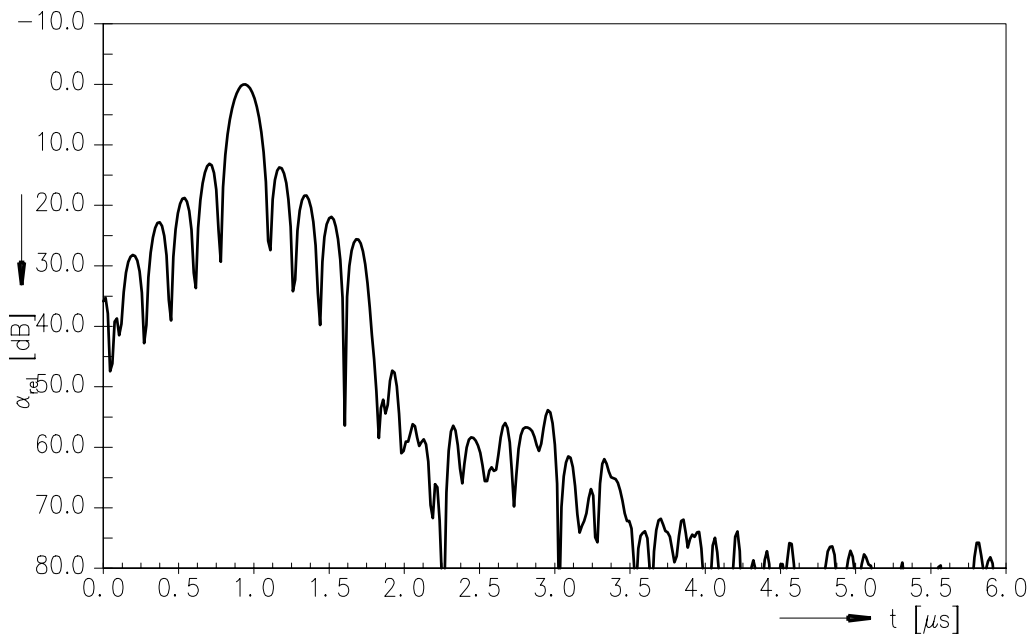
44.00 MHz

Data Sheet

Frequency response



Time domain response



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References

Type	X 6793 D
Ordering code	B39440-X6793-N201
Marking and package	C61157-A1-A21
Packaging	F61074-V8049-Z000
Date codes	L_1126
S-parameters	X6793N_NB.s4p
Soldering profile	S_6001
RoHS compatible	defined as compatible with the following documents: "DIRECTIVE 2002/95/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 27 January 2003 on the restriction of the use of certain hazardous substances in electrical and electronic equipment. 2005/618/EC from April 18th, 2005, amending Directive 2002/95/EC of the European Parliament and of the Council for the purposes of establishing the maximum concentration values for certain hazardous substances in electrical and electronic equipment."

For further information please contact your local EPCOS sales office or visit our webpage at www.epcos.com .

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