



## **SAW Components**

### **SAW bandpass filter**

Bandpass Filter for TV Applications

<b>Series/type:</b>	<b>X 6773 M</b>
<b>Ordering code:</b>	<b>B39352-X6773-M100</b>
Date:	Jan 22, 2007
Version:	2.0



SAW Components

X 6773 M

SAW bandpass filter

35.23 MHz

### Data sheet

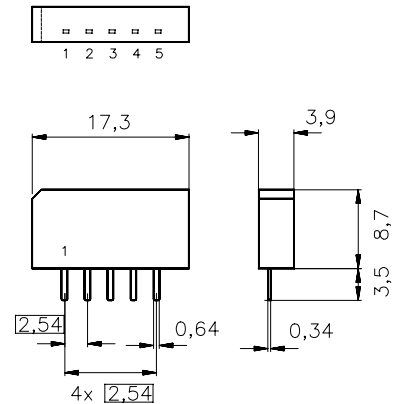
#### Application

- IF filter for TV applications
- Usable bandwidth 7.7 MHz
- Balanced input option



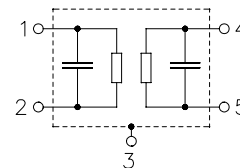
#### Features

- Plastic package **SIP5K**
- Approximate weight 1.0 g
- RoHS compatible
- Tinned CuFe alloy terminals



#### Pin configuration

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





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**Characteristics**

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

		min.	typ. @ 25 °C	max.	
<b>Center frequency</b> (center between 3 dB points)	$f_C$	—	35.225	—	MHz
<b>Insertion attenuation</b> Reference level for the 35.23 MHz following data	$\alpha$	20.7	22.2	23.7	dB
<b>Pass bandwidth</b>					
$\alpha_{rel} \leq 1\text{ dB}$	$B_{1dB}$	—	7.1	—	MHz
$\alpha_{rel} \leq 3\text{ dB}$	$B_{3dB}$	—	7.7	—	MHz
$\alpha_{rel} \leq 30\text{ dB}$	$B_{30dB}$	—	9.6	—	MHz
<b>Relative attenuation</b>	$\alpha_{rel}$				
	31.43 MHz	—	1.5	—	dB
	38.81 MHz	—	1.8	—	dB
	31.20 MHz	—	3.8	—	dB
	39.00 MHz	—	3.5	—	dB
	30.00 MHz	33.0	42.0	—	dB
Lower sidelobe					
	25.00 ... 28.60 MHz	35.0	43.0	—	dB
	28.60 ... 30.00 MHz	31.0	38.0	—	dB
Upper sidelobe					
	40.10 ... 43.10 MHz	31.0	38.0	—	dB
	43.10 ... 45.00 MHz	34.0	40.0	—	dB
<b>Reflected wave signal suppression</b> 1.1 $\mu\text{s}$ ... 6.0 $\mu\text{s}$ after main pulse (test pulse 250 ns, carrier frequency 35.23 MHz)		42.0	50.0	—	dB
<b>Feedthrough signal suppression</b> 1.3 $\mu\text{s}$ ... 1.2 $\mu\text{s}$ before main pulse (test pulse 250 ns, carrier frequency 35.23 MHz)		—	54.0	—	dB



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Data sheet

	min.	typ. @ 25 °C	max.	
<b>Group delay ripple</b> (p-p) $\Delta t$ 31.20 ... 39.00 MHz	—	40	—	ns
<b>Impedance</b> at 35.23 MHz Input: $Z_{IN} = R_{IN} \parallel C_{IN}$ Output: $Z_{OUT} = R_{OUT} \parallel C_{OUT}$	—	5.8  10.9 3.5   3.1	—	k $\Omega$    pF k $\Omega$    pF
<b>Temperature coefficient of frequency</b> $TC_f$	—	-72	—	ppm/K

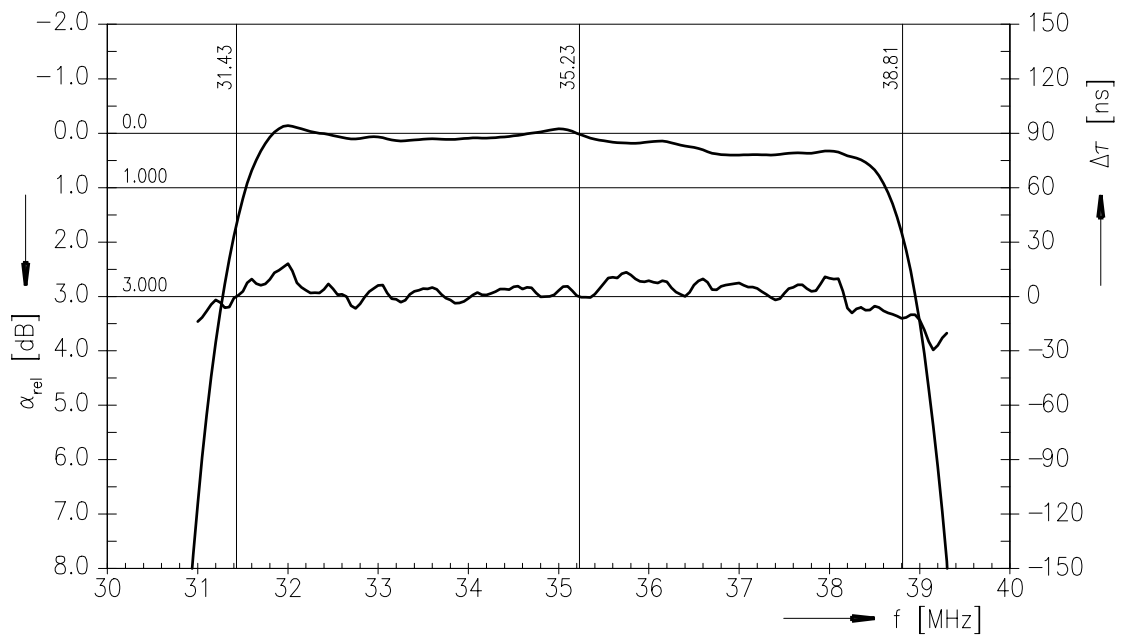
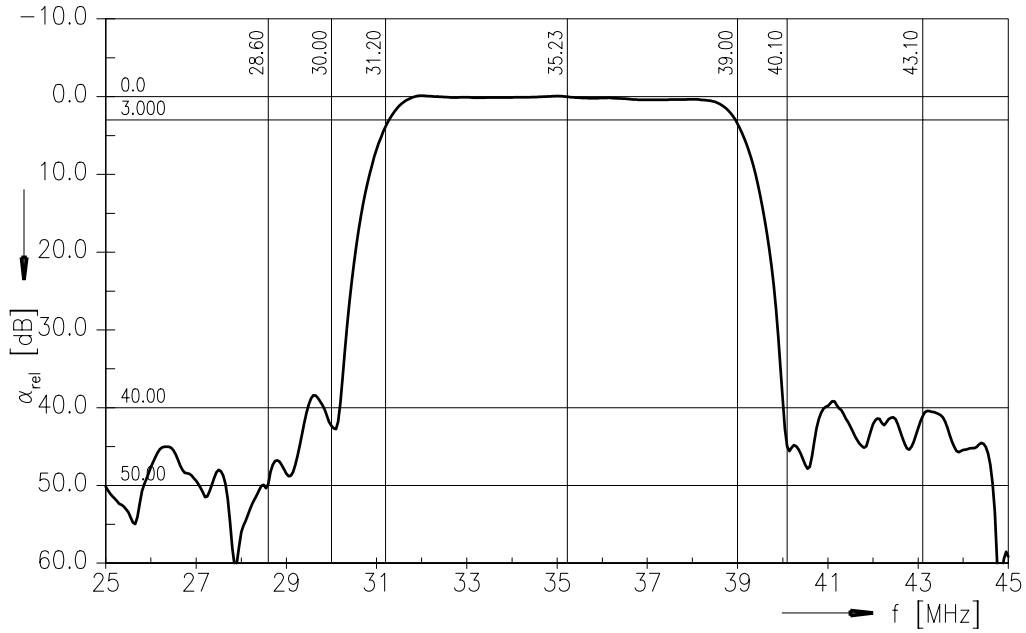
**Maximum ratings**

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



Data sheet

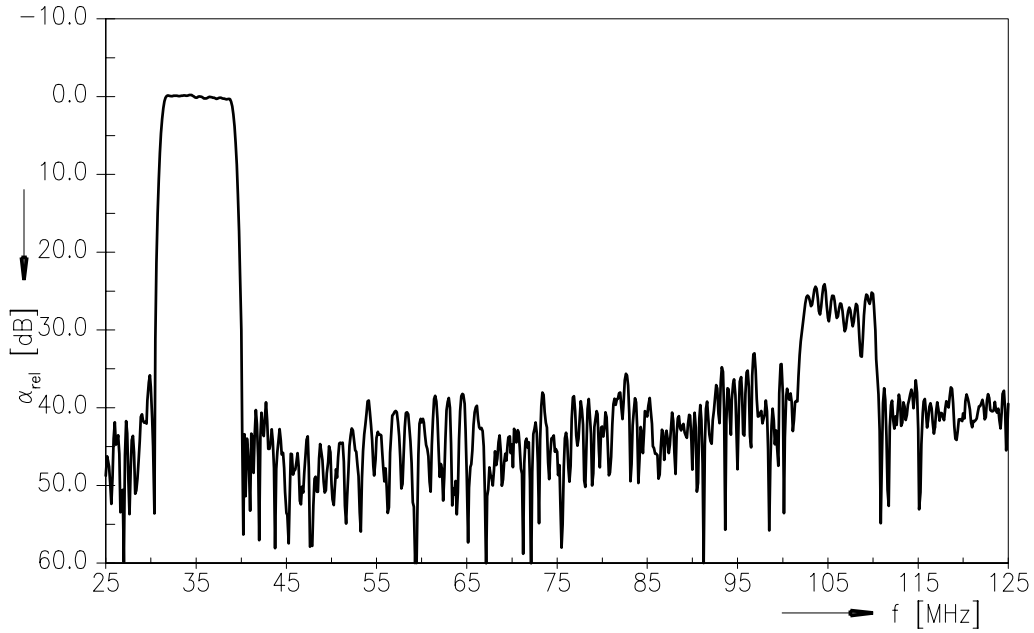
Frequency response



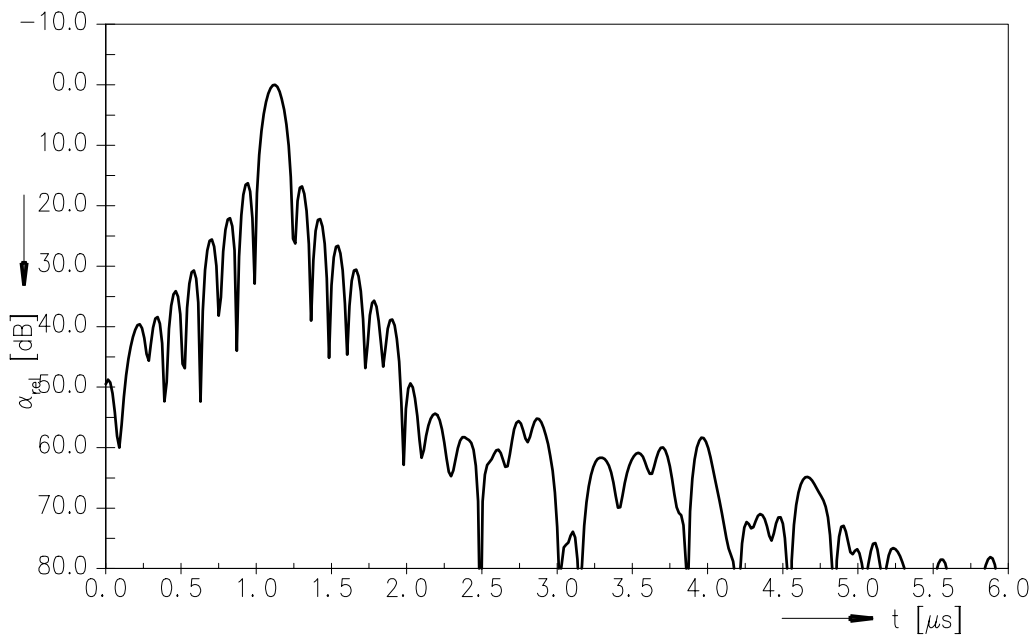


Data sheet

Frequency response



Time domain response





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<b>SAW bandpass filter</b>	<b>35.23 MHz</b>

Data sheet

## References

<b>Type</b>	X 6773 M
<b>Ordering code</b>	B39352-X6773-M100
<b>Marking and package</b>	C61157-A1-A15
<b>Packaging</b>	F61074-V8067-Z000
<b>Date codes</b>	L_1126
<b>S-parameters</b>	X6773M_NB.s4p
<b>Soldering profile</b>	S_6001
<b>RoHS compatible</b>	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](http://www.epcos.com) .

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