



SAW Components

SAW bandpass filter

Bandpass filter for digital cable applications

Series/type:	X 6752 M
Ordering code:	B39491-X6752-M100
Date:	August 01, 2006
Version:	2.0

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Data sheet

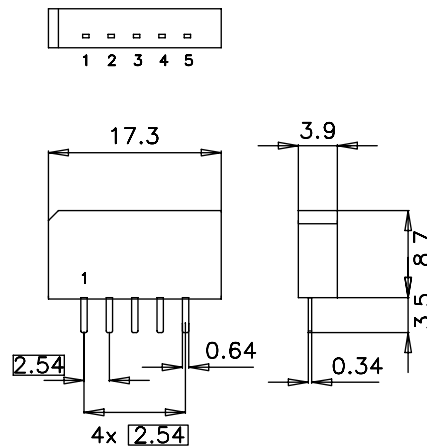
Application

- Bandpass filter for the QPSK data path
- Usable bandwidth 1.2 MHz
- Balanced input option



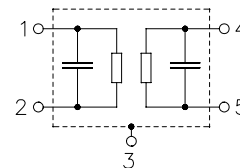
Features

- 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





SAW Components **X 6752 M**

SAW bandpass filter **49.10 MHz**

Data sheet

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.	
Center frequency (center between 10 dB points)	f_C	—	49.17	—	MHz
Insertion attenuation Reference level for the following data	α 49.17 (49.10) MHz	7.3	8.8	10.3	dB
Pass bandwidth					
$\alpha_{rel} \leq 6\text{ dB}$	B_{6dB}	—	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}				
47.67 (47.60) MHz		40.0	46.0	—	dB
50.67 (50.60) MHz		26.0	30.0	—	dB
51.17 (51.10) MHz		29.0	33.0	—	dB
Lower sidelobe					
40.07 ... 45.07 (40.00 ... 45.00) MHz		38.0	47.0	—	dB
45.07 ... 47.67 (45.00 ... 47.60) MHz		34.0	40.0	—	dB
Upper sidelobe					
50.67 ... 53.07 (50.60 ... 53.00) MHz		22.0	28.0	—	dB
53.07 ... 60.07 (53.00 ... 60.00) MHz		36.0	42.0	—	dB
Reflected wave signal suppression 1.3 μ s ... 6.0 μ s after main pulse (test pulse 250 ns, carrier frequency 49.17 MHz)		38.0	44.0	—	dB
Group delay ripple (p-p)	Δt				
48.82 ... 49.52 (48.75 ... 49.45) MHz		—	60	—	ns
Impedance at 49.17 MHz					
Input: $Z_{IN} = R_{IN} \parallel C_{IN}$		—	0.2 15.0	—	k Ω pF
Output: $Z_{OUT} = R_{OUT} \parallel C_{OUT}$		—	2.3 2.2	—	k Ω pF
Temperature coefficient of frequency	TC_f	—	-72	—	ppm/K

Maximum ratings

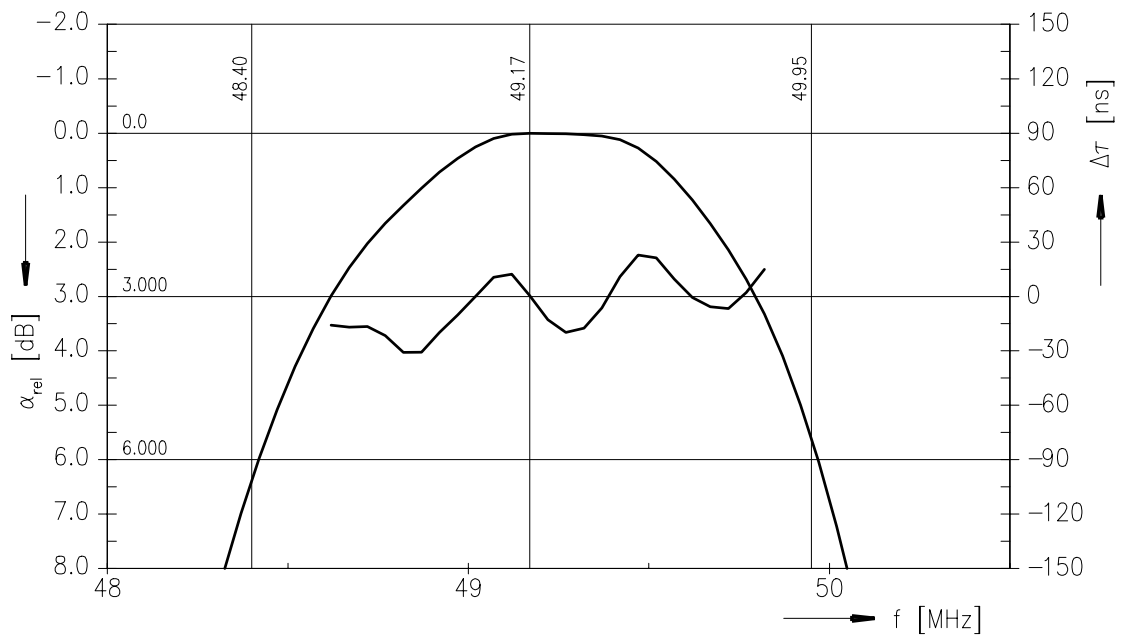
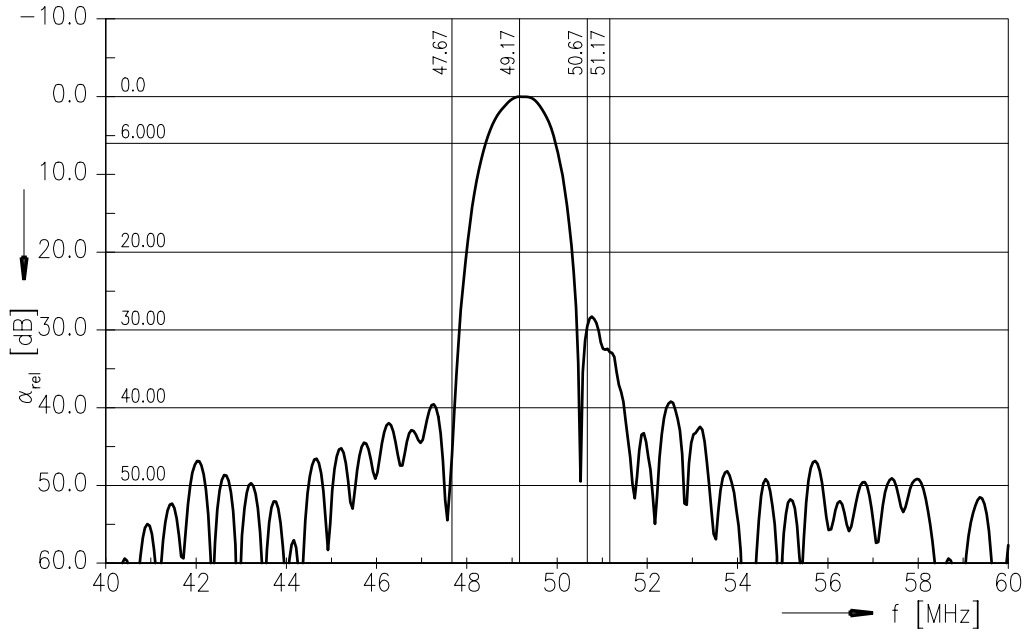
Operable temperature range	T	-25 / +65	°C	
Storage temperature range	T_{stg}	-40 / +85	°C	
DC voltage	V_{DC}	5	V	between any terminals
AC voltage	V_{pp}	10	V	between any terminals

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



Data sheet

Frequency response



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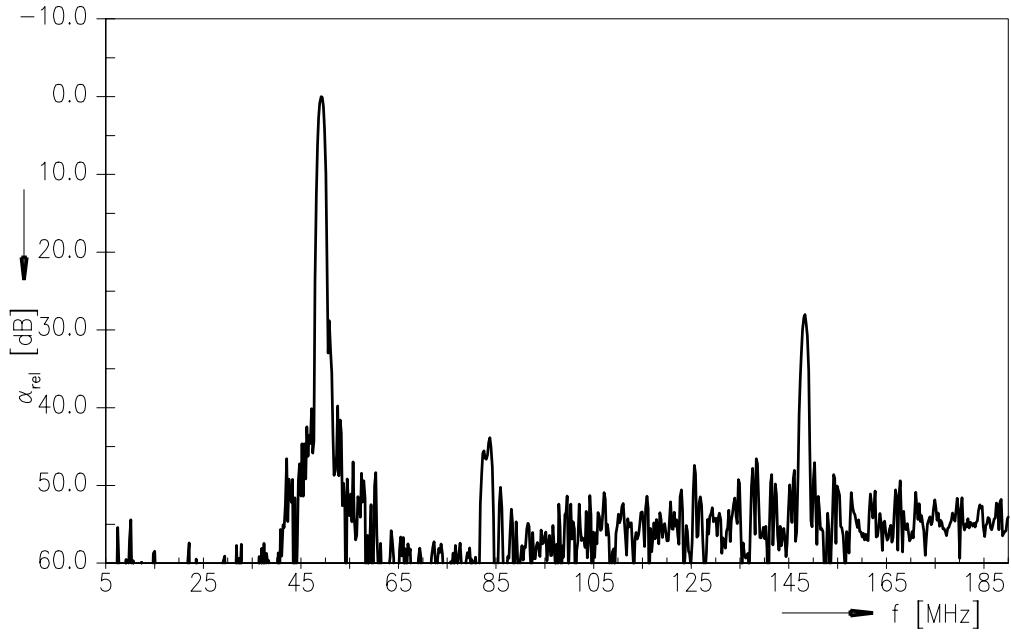
X 6752 M

SAW bandpass filter

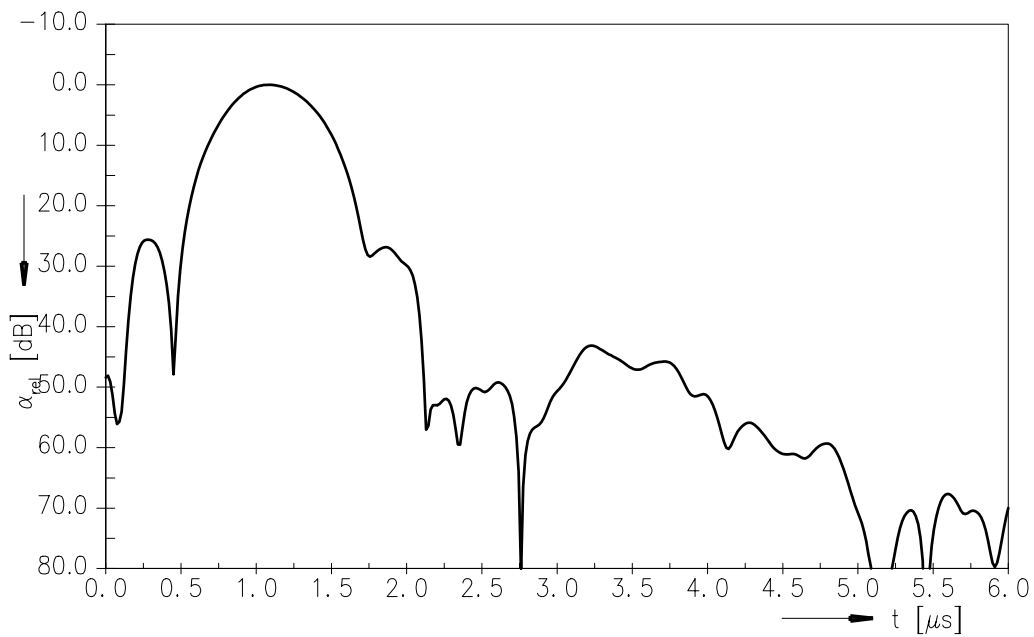
49.10 MHz

Data sheet

Frequency response



Time domain response



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



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SAW bandpass filter	49.10 MHz

Data sheet

References

Type	X 6752 M
Ordering code	B39491-X6752-M100
Marking and package	C61157-A1-A15
Packaging	F61074-V8067-Z000
Date codes	L_1126
S-parameters	X6752M_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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Please read *cautions and warnings and important notes* at the end of this document.

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