



## SAW multimedia filters

### Series/Type: X7061L

The following products presented in this data sheet are being withdrawn.

Ordering Code	Substitute Product	Date of Withdrawal	Deadline Last Orders	Last Shipments
B39491X7061L100		2011-01-14	2011-09-30	2012-09-30

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SAW Components

X 7061 L

SAW bandpass filter

49.10 MHz

Data Sheet

**SMD**

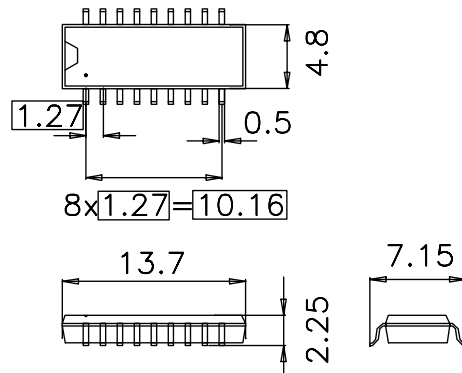
### Application

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



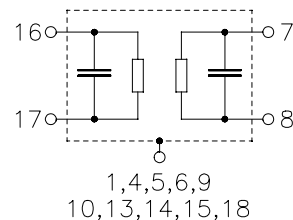
### Features

- Duroplast package **DIP18D**
- Approximate weight 0.5 g
- Surface Mounted Technology (SMT)
- Standard IC small outline (SO) package
- RoHS compatible
- Tinned CuFe alloy terminals



### Pin configuration

- 17 Input
- 16 Input - ground
- 1,4,5,6,9,10,13,14,15,18 Chip carrier - ground
- 7,8 Output
- 2,3,11,12 Not connected



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.	
<b>Center frequency</b> (center between 10 dB points)	$f_C$	—	49.17	—	MHz
<b>Insertion attenuation</b> Reference level for the following data	$\alpha$ 49.17 (49.10) MHz	6.3	7.8	9.3	dB
<b>Pass bandwidth</b>					
$\alpha_{rel} \leq 6\text{dB}$	$B_{6\text{dB}}$	—	1.6	—	MHz
$\alpha_{rel} \leq 20\text{dB}$	$B_{20\text{dB}}$	—	2.4	—	MHz
$\alpha_{rel} \leq 30\text{dB}$	$B_{30\text{dB}}$	—	3.0	—	MHz
<b>Relative attenuation</b>	$\alpha_{rel}$				
47.67 (47.60) MHz		31.0	35.0	—	dB
50.67 (50.60) MHz		26.0	28.0	—	dB
51.17 (51.10) MHz		28.0	33.0	—	dB
Lower sidelobe					
40.07 ... 45.07 (40.00 ... 45.00) MHz		40.0	47.0	—	dB
45.07 ... 47.67 (45.00 ... 47.60) MHz		30.0	35.0	—	dB
Upper sidelobe					
50.67 ... 53.07 (50.60 ... 53.00) MHz		23.0	27.0	—	dB
53.07 ... 60.07 (53.00... 60.00) MHz		36.0	42.0	—	dB
<b>Reflected wave signal suppression</b> 1.3 $\mu\text{s}$ ... 6.0 $\mu\text{s}$ after main pulse (test pulse 250 ns, carrier frequency 49.17 MHz)		34.0	38.0	—	dB
<b>Group delay ripple (p-p)</b>	$\Delta\tau$				
48.82 ... 49.52 (48.75 ... 49.45) MHz		—	60	—	ns
<b>Impedance at 49.17 MHz</b>					
Input: $Z_{IN} = R_{IN} \parallel C_{IN}$		—	0.3 $\parallel$ 14.7	—	k $\Omega$ $\parallel$ pF
Input: $Z_{OUT} = R_{OUT} \parallel C_{OUT}$		—	1.9 $\parallel$ 2.6	—	k $\Omega$ $\parallel$ pF
<b>Temperature coefficient of frequency</b>	$TC_f$	—	-72	—	ppm/K



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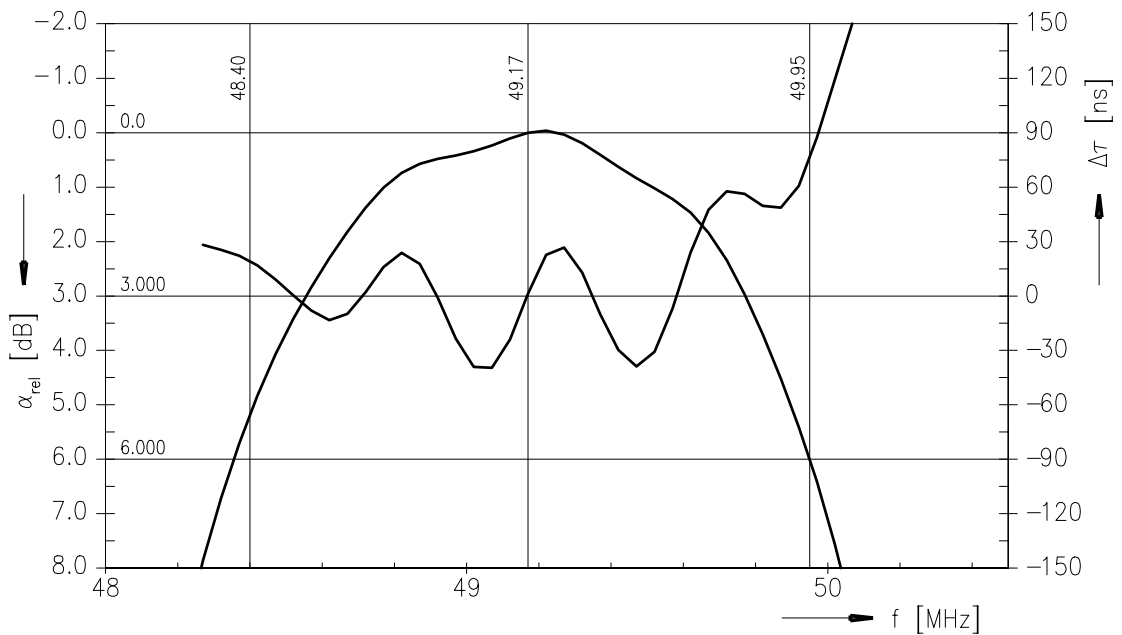
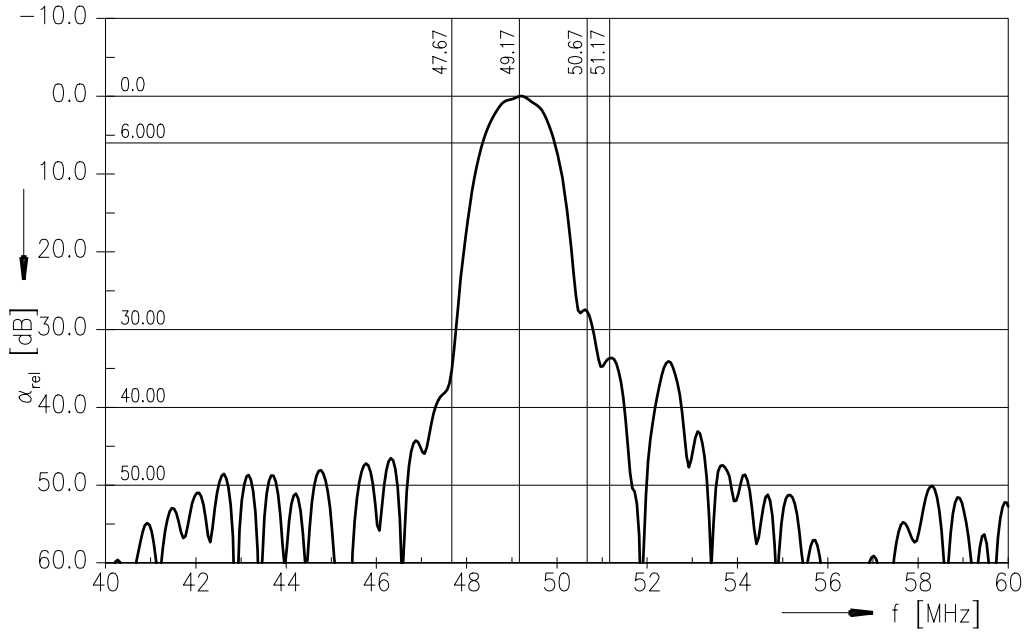
SAW bandpass filter

49.10 MHz

Data Sheet



Frequency response



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X 7061 L

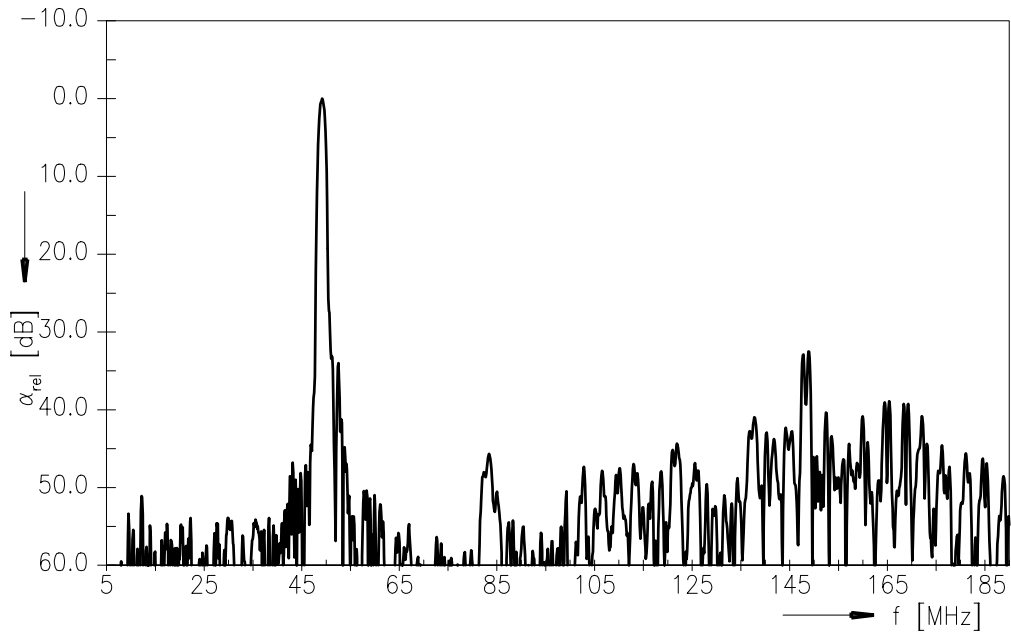
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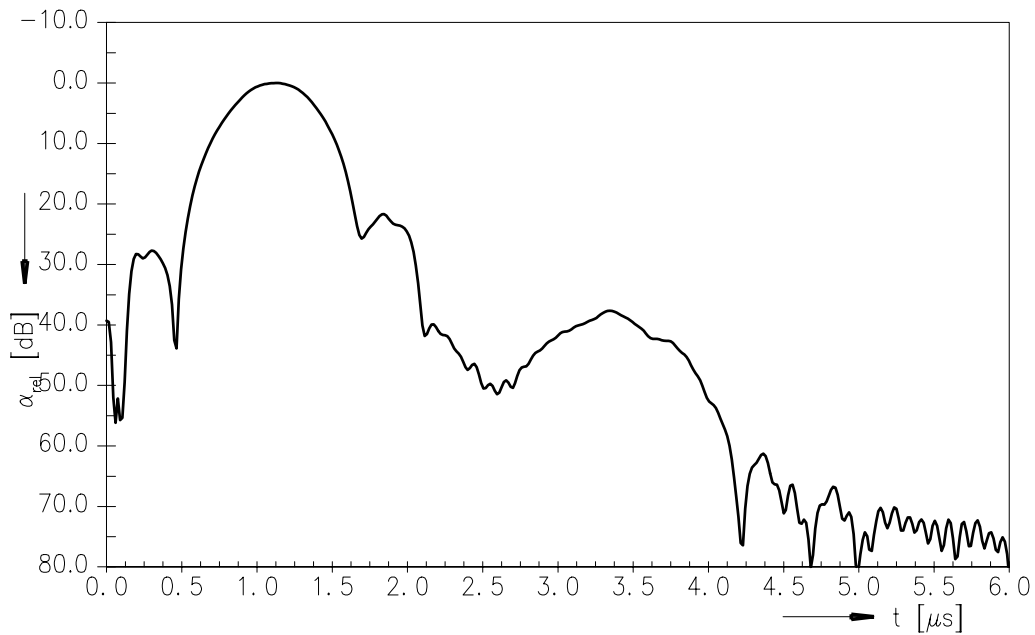
Data Sheet



### Frequency response



### Time domain response



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**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



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## References

<b>Type</b>	X 7061 L
<b>Ordering code</b>	B39491-X7061-L100
<b>Marking and package</b>	C61157-A2-A4
<b>Packaging</b>	F61074-V8058-Z000
<b>Date codes</b>	L_1126
<b>S-parameters</b>	X7061L_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."

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