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# **SAW Components**

Data Sheet K 2973 M







SAW Components	K 2973 M
IF Filter for Intercarrier Applications	38,00 MHz

**Data Sheet** 

#### **Standard**

- B/G
- D/K

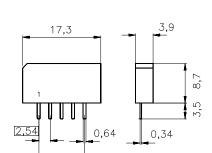
#### **Features**

- TV IF filter with Nyquist slope and sound shelf
- Broad sound shelf for sound carriers at 31,50 MHz and 32,50 MHz
- Group delay predistortion

#### **Terminals**

■ Tinned CuFe alloy

### Plastic package SIP5K

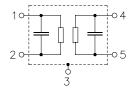


Dimensions in mm, approx. weight 1,0 g

4x 2,54

#### Pin configuration

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



Туре	Ordering code	Marking and package according to	Packing according to		
K 2973 M	B39380-K2973-M100	C61157-A1-A15	F61074-V8067-Z000		

#### **Maximum ratings**

Operable temperature range	$T_{A}$	-25/+65	°C	
Storage temperature range	$T_{ m stg}$	-40/+85	°C	
DC voltage	$V_{\rm DC}$	12	V	between any terminals
AC voltage	$V_{\sf pp}$	10	V	between any terminals





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#### **Characteristics**

 $\begin{array}{lll} \mbox{Reference temperature:} & T_{\mbox{A}} & = 25 \ ^{\circ}\mbox{C} \\ \mbox{Terminating source impedance:} & Z_{\mbox{S}} & = 50 \ \Omega \\ \mbox{Terminating load impedance:} & Z_{\mbox{L}} & = 2 \ \mbox{k}\Omega \ || \ 3 \ \mbox{pF} \end{array}$ 

		min.	typ.	max.	
Insertion attenuation	α				
Reference level for the 36,50 MHz	<u>.</u>	15,6	17,1	18,6	dB
following data					
Relative attenuation	$lpha_{\text{rel}}$				
Picture carrier 38,00 MHz		5,0	6,0	7,0	dB
Color carrier 33,57 MHz		0,7	1,7	2,7	dB
Sound carrier 31,50 MHz		19,1	20,6	22,1	dB
32,50 MHz		15,8	17,3	_	dB
Adjacent picture carrier 30,00 MHz		45,0	54,0	_	dB
31,00 MHz		40,0	60,0	_	dB
Adjacent sound carrier 39,50 MHz		43,0	55,0	_	dB
40,50 MHz		41,0	51,0	_	dB
Lower sidelobe 25,00 30,00 MHz	<u>.</u>	42,0	48,0	_	dB
Upper sidelobe 39,50 45,00 MHz	<u>'</u>	40,0	46,0	_	dB
Reflected wave signal suppression					
1,2 μs 6,0 μs after main pulse		42,0	51,0	_	dB
(test pulse 250 ns,		,	,		
carrier frequency 36,50 MHz)					
Feedthrough signal suppression					
1,2μs 1,1 μs before main pulse		50,0	56,0	_	dB
(test pulse 250 ns,					
carrier frequency 36,50 MHz)					
Group delay predistortion	Δτ				
(reference frequency 38,90 MHz)	ý				
34,50 MHz	,	_	-80	_	ns
33,57 MHz		_	0	_	ns
Impedance at 36,50 MHz					
Input: $Z_{IN} = R_{IN} \parallel C_{IN}$		_	2,3    11,8	_	$k\Omega \parallel pF$
Output: $Z_{OUT} = R_{OUT} \parallel C_{OUT}$		_	3,5    3,1	_	k $\Omega$    pF
Temperature coefficient of frequency	$TC_{f}$	_	-72	_	ppm/K





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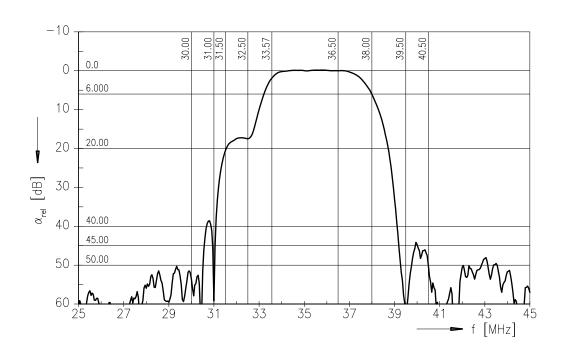
38,00 MHz

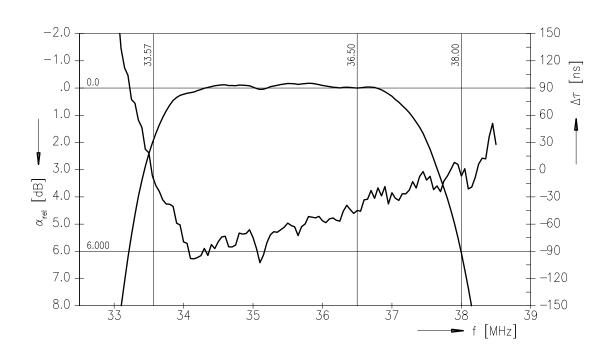
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#### Frequency response





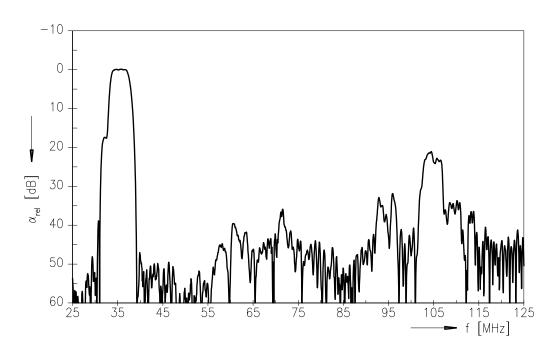




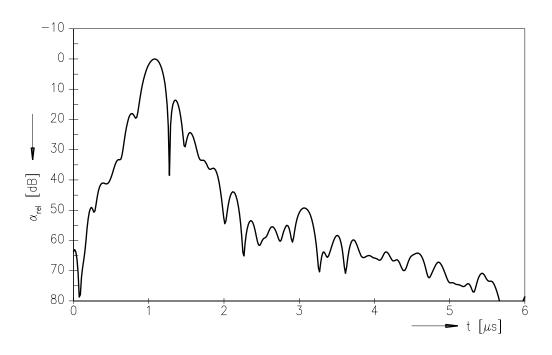
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#### Frequency response



#### Time domain response







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