



# 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

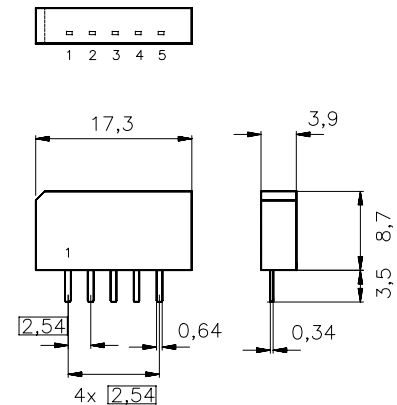
Plastic package **SIP5K**

**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**

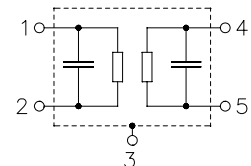
- Tinned CuFe alloy



Dimensions in mm, approx. weight 1,0 g

**Pin configuration**

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



Type	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	$T_{stg}$	-40/+85	°C	
DC voltage	$V_{DC}$	12	V	between any terminals
AC voltage	$V_{pp}$	10	V	between any terminals


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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.	max.	
<b>Insertion attenuation</b>					
	$\alpha$				
Reference level for the following data	36,50 MHz	15,6	17,1	18,6	dB
<b>Relative attenuation</b>					
	$\alpha_{rel}$				
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	42,0	48,0	—	dB
Upper sidelobe	39,50 ... 45,00 MHz	40,0	46,0	—	dB
<b>Reflected wave signal suppression</b>					
1,2 $\mu$ s ... 6,0 $\mu$ s after main pulse (test pulse 250 ns, carrier frequency 36,50 MHz)		42,0	51,0	—	dB
<b>Feedthrough signal suppression</b>					
1,2 $\mu$ s ... 1,1 $\mu$ s before main pulse (test pulse 250 ns, carrier frequency 36,50 MHz)		50,0	56,0	—	dB
<b>Group delay predistortion</b>					
(reference frequency 38,90 MHz)					
	$\Delta\tau$				
	34,50 MHz	—	-80	—	ns
	33,57 MHz	—	0	—	ns
<b>Impedance at 36,50 MHz</b>					
	Input: $Z_{IN} = R_{IN} \parallel C_{IN}$	—	2,3 $\parallel$ 11,8	—	k $\Omega$ $\parallel$ pF
	Output: $Z_{OUT} = R_{OUT} \parallel C_{OUT}$	—	3,5 $\parallel$ 3,1	—	k $\Omega$ $\parallel$ pF
<b>Temperature coefficient of frequency</b>					
	$TC_f$	—	-72	—	ppm/K



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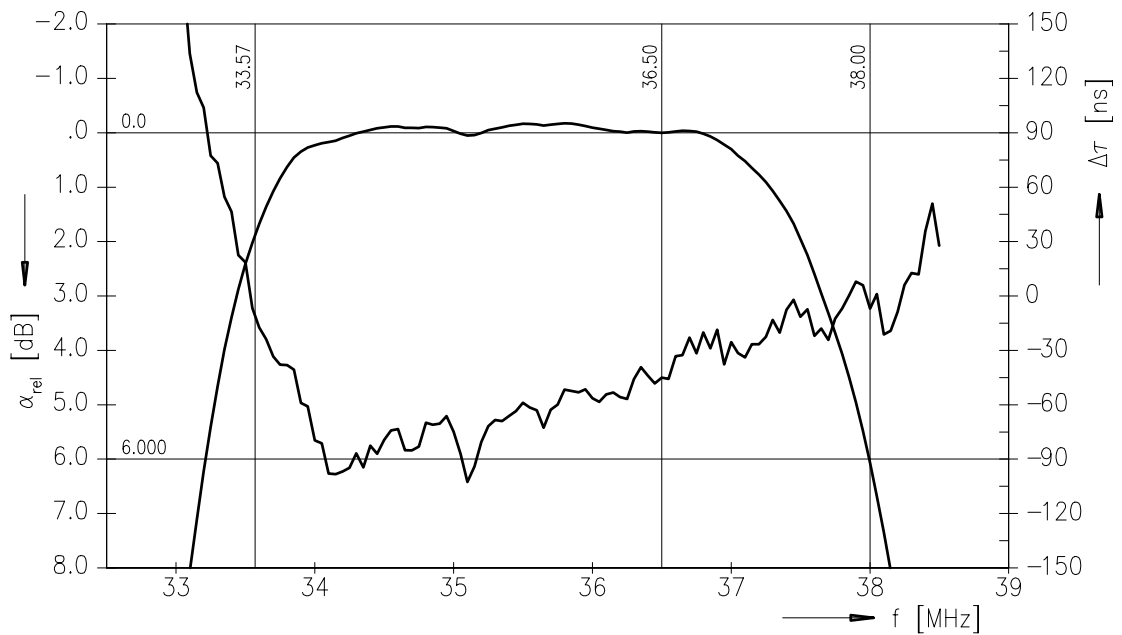
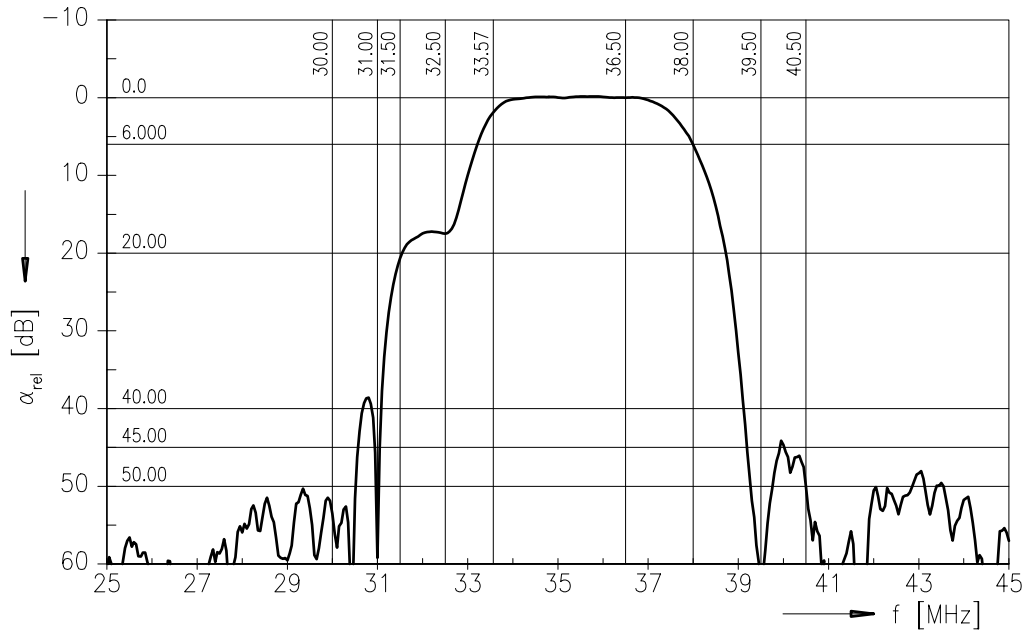
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Frequency response





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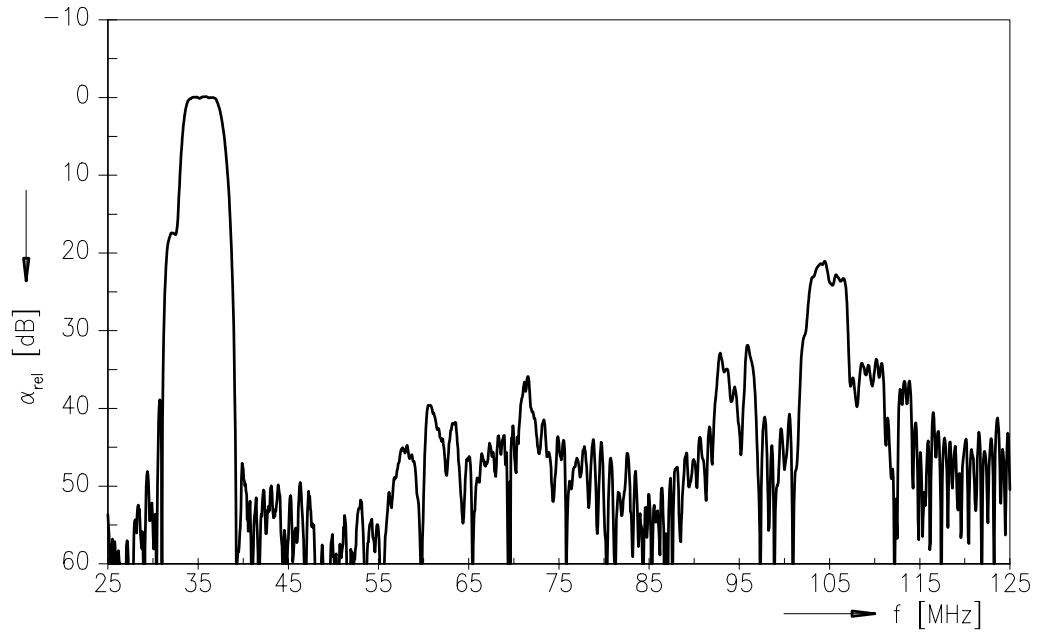
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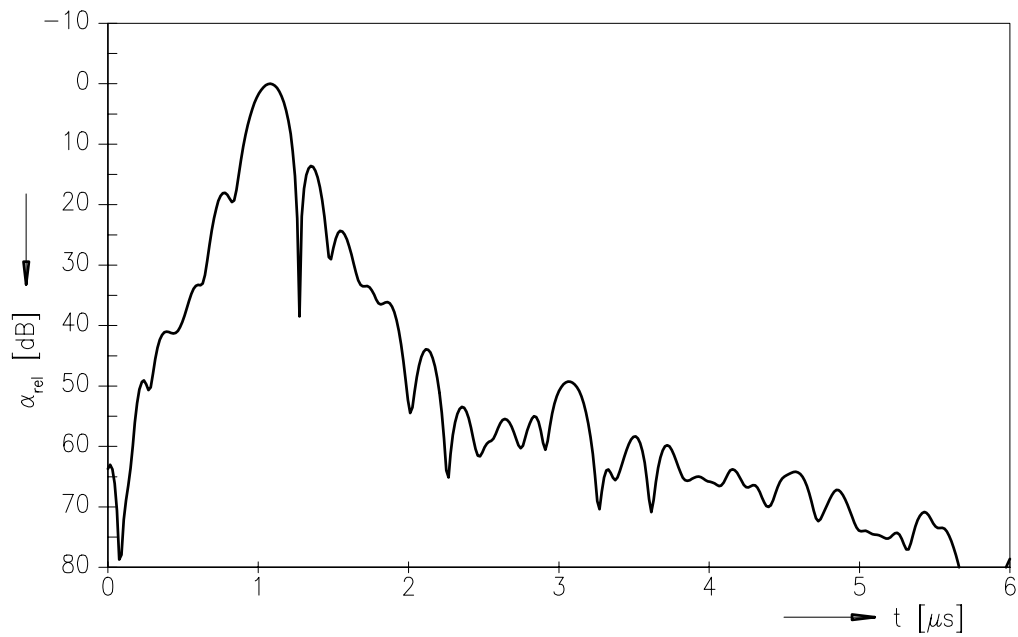
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Frequency response



Time domain response





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