



# SAW Components

Data Sheet K 2959 M





**SAW Components**

**K 2959 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
- High color carrier level
- Constant group delay

**Terminals**

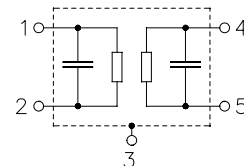
- Tinned CuFe alloy



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 2959 M	B39380-K2959-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	$V_{DC}$	5	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	16,5	18,0	19,5	dB
<b>Relative attenuation</b>					
	$\alpha_{rel}$				
Picture carrier	38,00 MHz	4,1	5,1	6,1	dB
Color carrier	33,57 MHz	0,0	1,0	2,0	dB
Sound carrier	31,50 MHz	17,9	19,4	—	dB
	32,50 MHz	15,5	17,0	18,5	dB
Adjacent picture carrier	30,00 MHz	46,0	55,0	—	dB
	31,00 MHz	40,0	56,0	—	dB
Adjacent sound carrier	39,50 MHz	42,0	52,0	—	dB
	40,50 MHz	43,0	54,0	—	dB
Lower sidelobe	25,00 ... 30,00 MHz	40,0	46,0	—	dB
Upper sidelobe	39,50 ... 45,00 MHz	35,0	41,0	—	dB
<b>Reflected wave signal suppression</b>					
1,1 $\mu$ s ... 6,0 $\mu$ s after main pulse (test pulse 250 ns, carrier frequency 36,50 MHz)		42,0	52,0	—	dB
<b>Feedthrough signal suppression</b>					
1,1 $\mu$ s ... 1,0 $\mu$ s before main pulse (test pulse 250 ns, carrier frequency 36,50 MHz)		50,0	56,0	—	dB
<b>Group delay ripple (p-p)</b>	$\Delta\tau$	—	30	—	ns
<b>Impedance at 36,50 MHz</b>					
Input: $Z_{IN} = R_{IN} \parallel C_{IN}$		—	3,0 $\parallel$ 10,8	—	k $\Omega$ $\parallel$ pF
Output: $Z_{OUT} = R_{OUT} \parallel C_{OUT}$		—	3,6 $\parallel$ 2,7	—	k $\Omega$ $\parallel$ pF
<b>Temperature coefficient of frequency</b>	$TC_f$	—	-72	—	ppm/K



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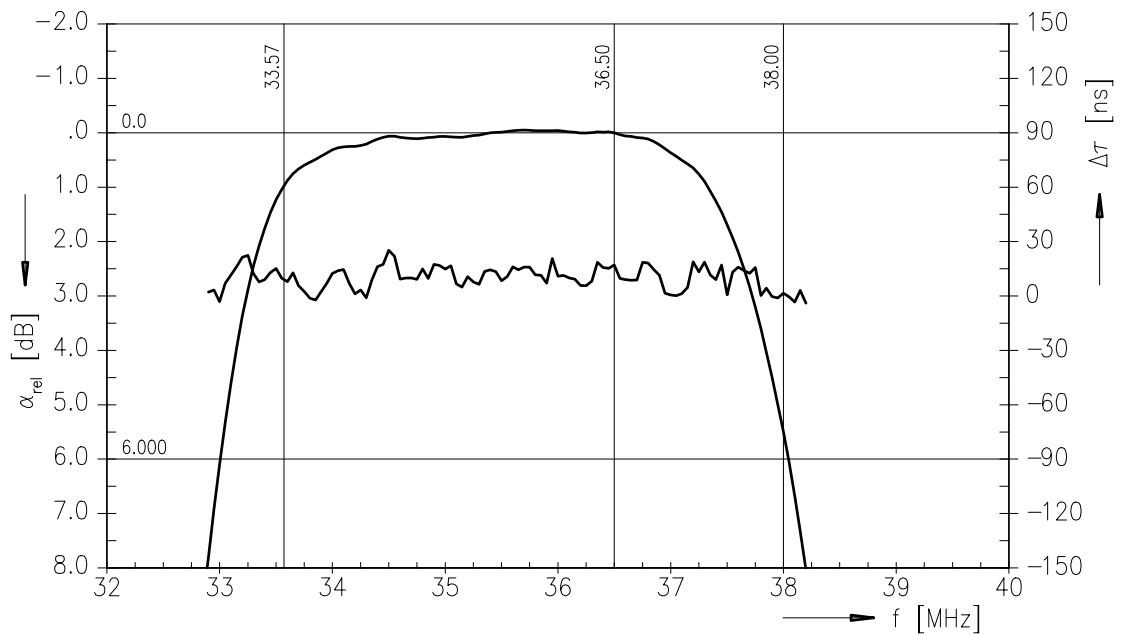
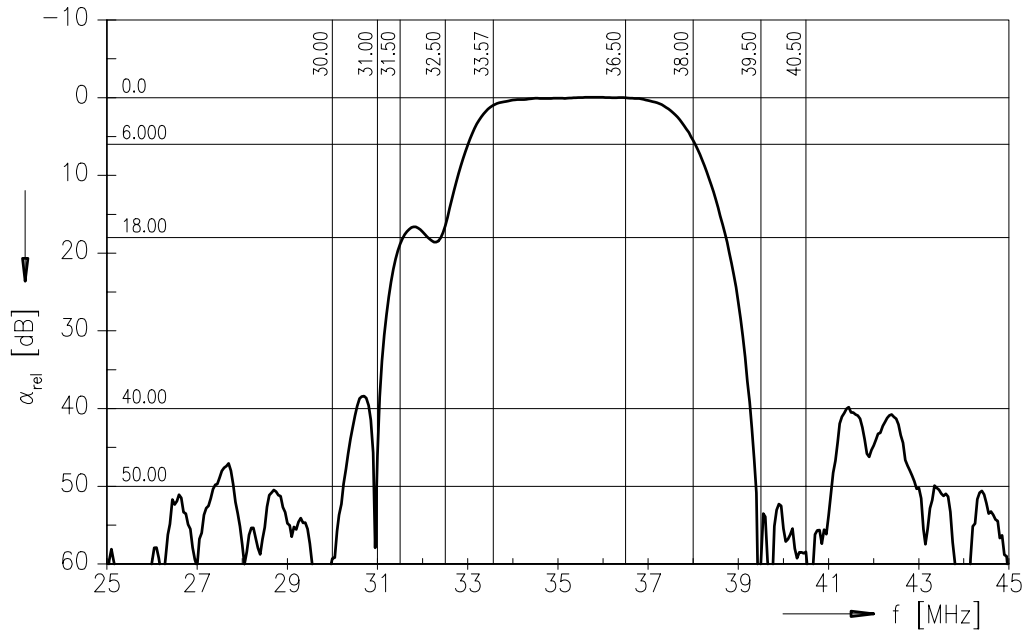
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Frequency response





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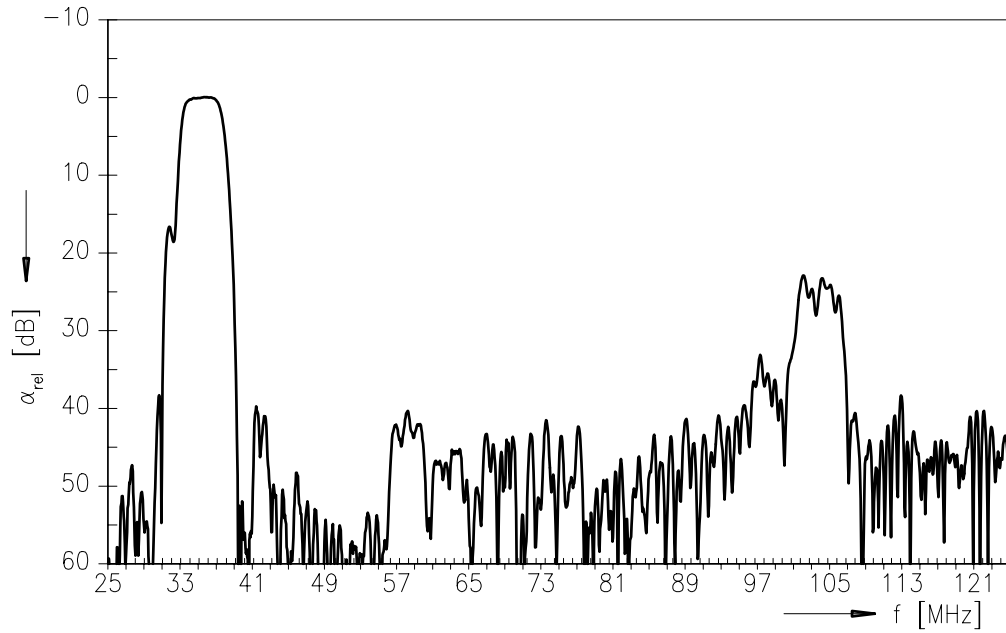
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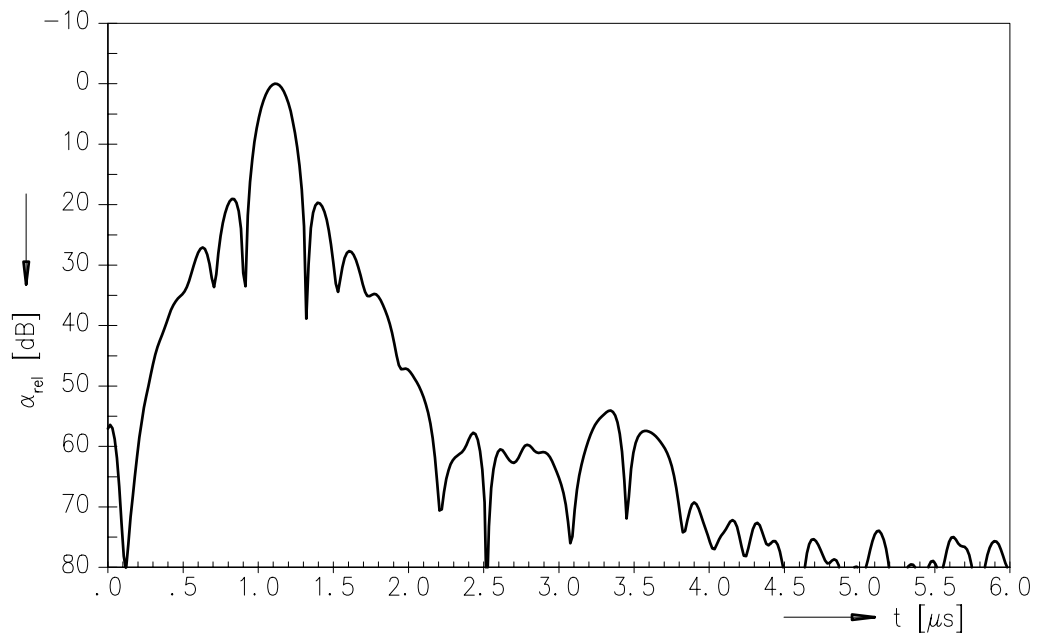
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Frequency response



Time domain response





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