



# SAW Components

Data Sheet M 1871 M





**SAW Components**

**M 1871 M**

**IF Filter for Intercarrier Applications**

**45,75 MHz**

**Data Sheet**

**Standard**

Plastic package **SIP5K**

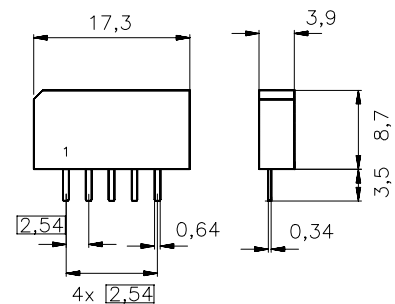
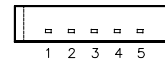
- M/N

**Features**

- IF Filter with Nyquist slope and sound shelf
- Constant group delay

**Terminals**

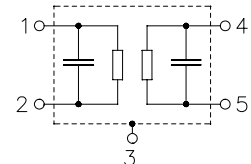
- Tinned CuFe alloy



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
M 1871 M	B39458-M1871-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**

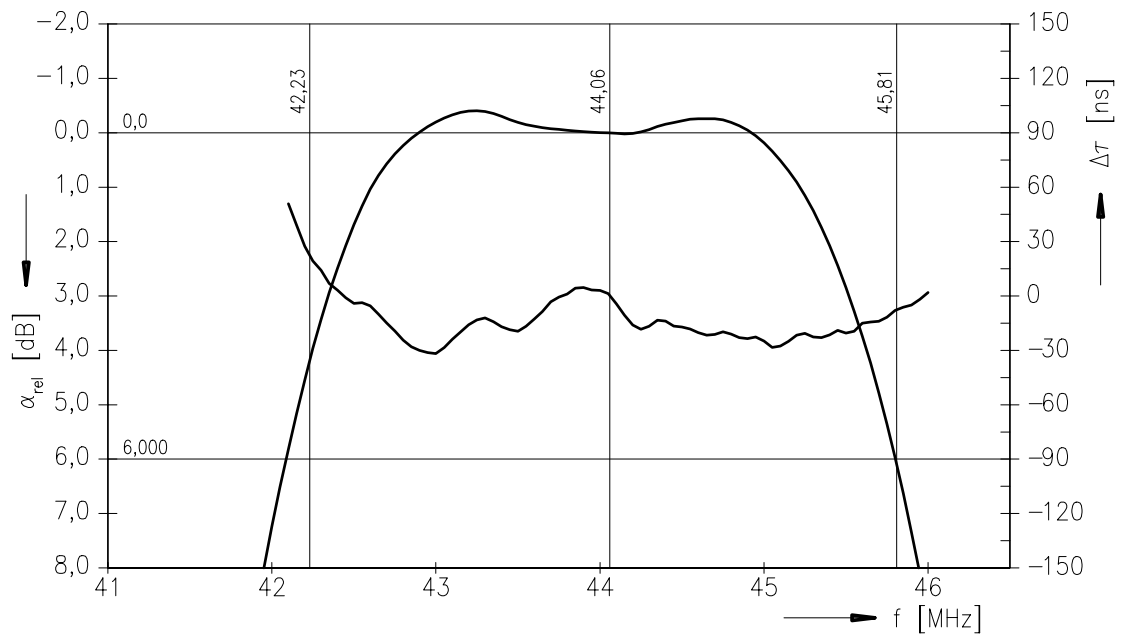
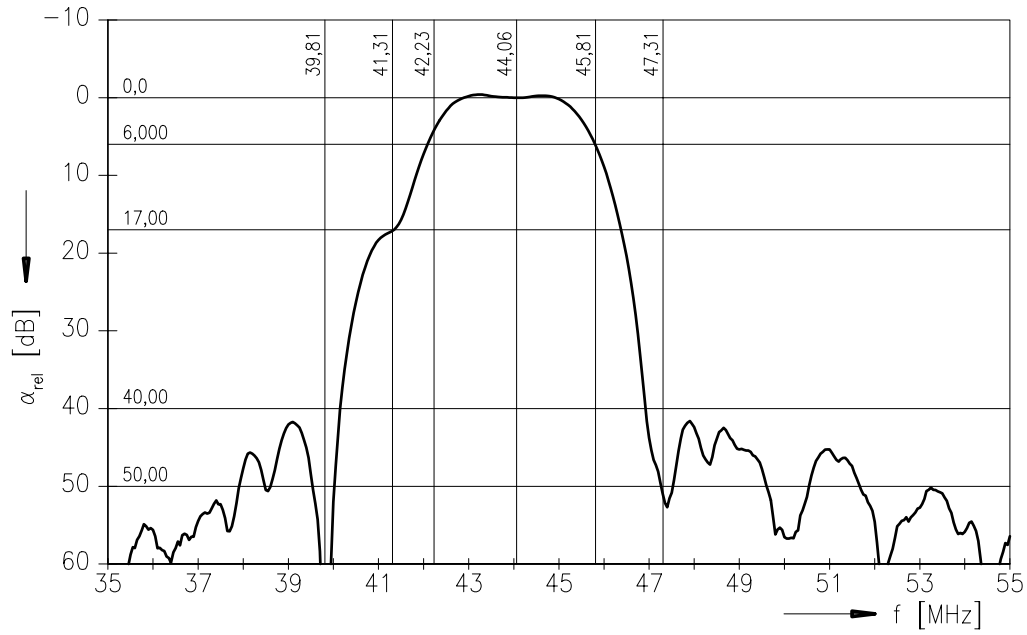
Reference temperature:  $T_A = 25 (45) \text{ }^\circ\text{C}$   
 Terminating source impedance:  $Z_S = 50 \text{ } \Omega$   
 Terminating load impedance:  $Z_L = 2 \text{ k}\Omega \parallel 3 \text{ pF}$

		min.	typ.	max.	
<b>Insertion attenuation</b>					
	$\alpha$				
Reference level for the following data	44,06 (44,00) MHz	11,2	12,7	14,2	dB
<b>Relative attenuation</b>					
	$\alpha_{rel}$				
Picture carrier	45,81 (45,75) MHz	5,0	6,0	7,0	dB
Color carrier	42,23 (42,17) MHz	3,3	4,3	5,3	dB
Sound carrier	41,31 (41,25) MHz	15,6	17,1	18,6	dB
Adjacent picture carrier	39,81 (39,75) MHz	48,0	62,0	—	dB
Adjacent sound carrier	47,31 (47,25) MHz	40,0	47,0	—	dB
Lower sidelobe					dB
	35,06 ... 39,81 (35,00 ... 39,75) MHz	36,0	42,0	—	dB
Upper sidelobe					dB
	47,31 ... 55,06 (47,25 ... 55,00) MHz	35,0	41,0	—	dB
<b>Reflected wave signal suppression</b>					
1,0 $\mu\text{s}$ ... 6,0 $\mu\text{s}$ after main pulse (test pulse 250 ns, carrier frequency 44,06 MHz)		42,0	52,0	—	dB
<b>Feedthrough signal suppression</b>					
0,9 $\mu\text{s}$ ... 0,8 $\mu\text{s}$ before main pulse (test pulse 250 ns, carrier frequency 44,06 MHz)		50,0	56,0	—	dB
<b>Group delay ripple (p-p)</b>	$\Delta\tau$	—	50	—	ns
<b>Impedance at 44,06 MHz</b>					
Input: $Z_{IN} = R_{IN} \parallel C_{IN}$		—	1,6 $\parallel$ 8,4	—	k $\Omega$ $\parallel$ pF
Output: $Z_{OUT} = R_{OUT} \parallel C_{OUT}$		—	1,1 $\parallel$ 3,6	—	k $\Omega$ $\parallel$ pF
<b>Temperature coefficient of frequency</b>	$TC_f$	—	-72	—	ppm/K



Data Sheet

Frequency response





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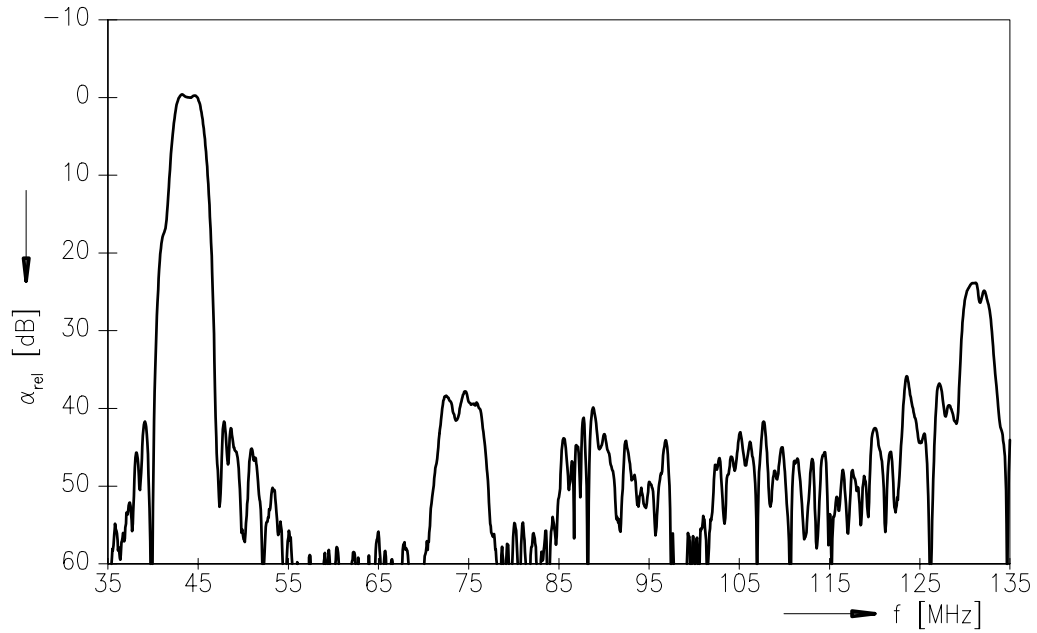
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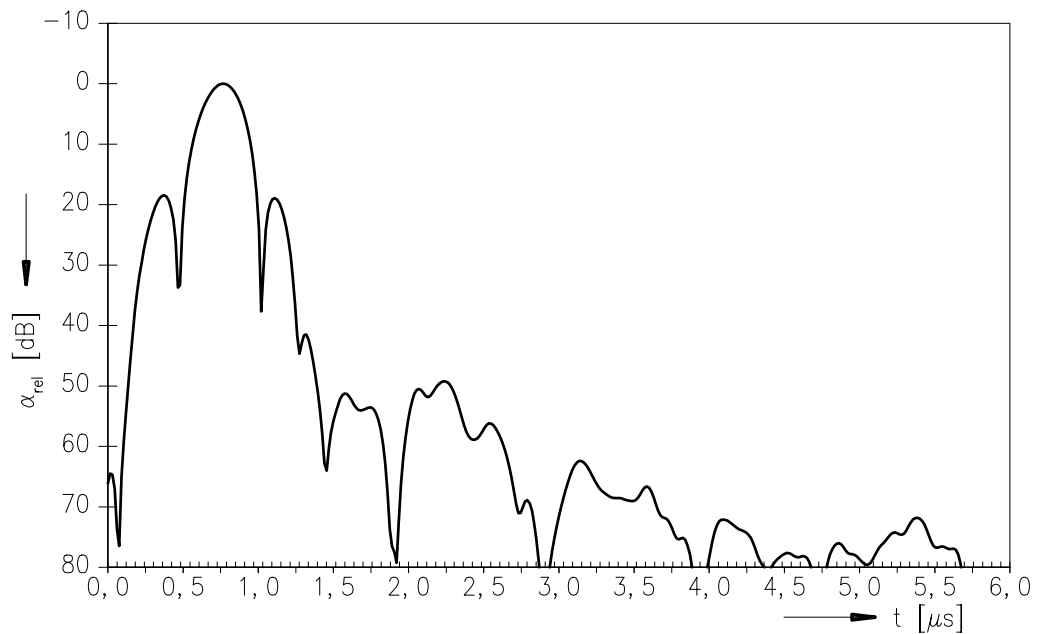
45,75 MHz

Data Sheet

Frequency response



Time domain response





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