



# SAW Components

Data Sheet G 1985 M





**SAW Components**

**G 1985 M**

**IF Filter for Intercarrier Applications**

**38,90 MHz**

**Data Sheet**

**Standard**

- B/G

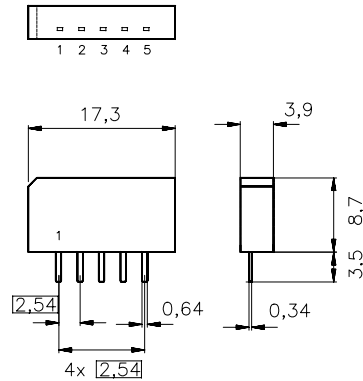
**Features**

- TV IF filter with Nyquist slope and sound shelf
- High color carrier level
- Reduced group delay predistortion as compared with standard B/G, half
- Extended sound shelf for NICAM reception
- Suitable for CENELEC EN 55020

**Terminals**

- Tinned CuFe alloy

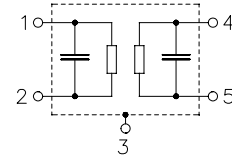
Plastic package **SIP5K**



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
G 1985 M	B39389-G1985-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**

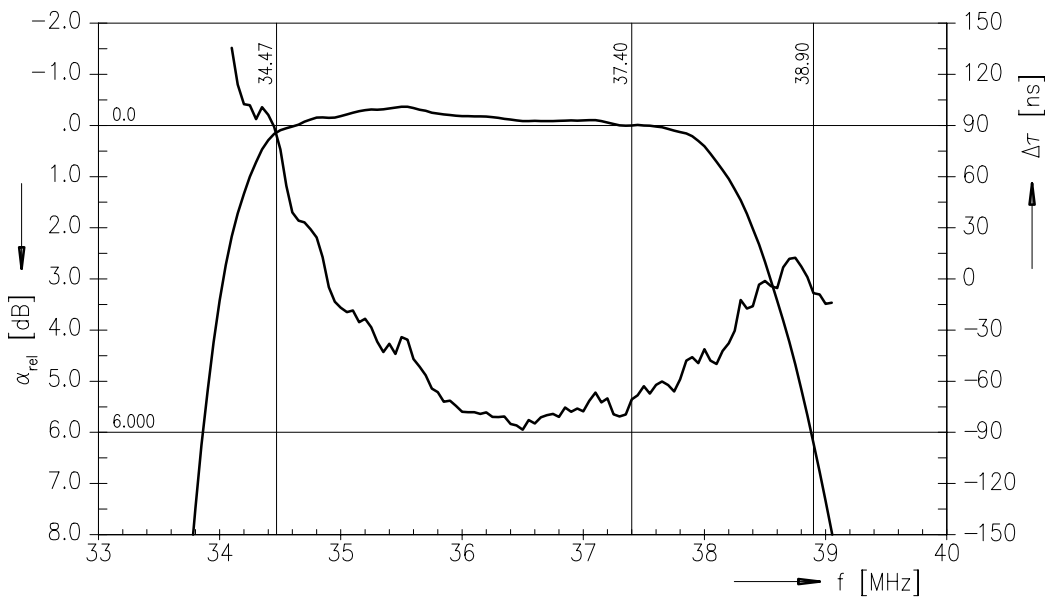
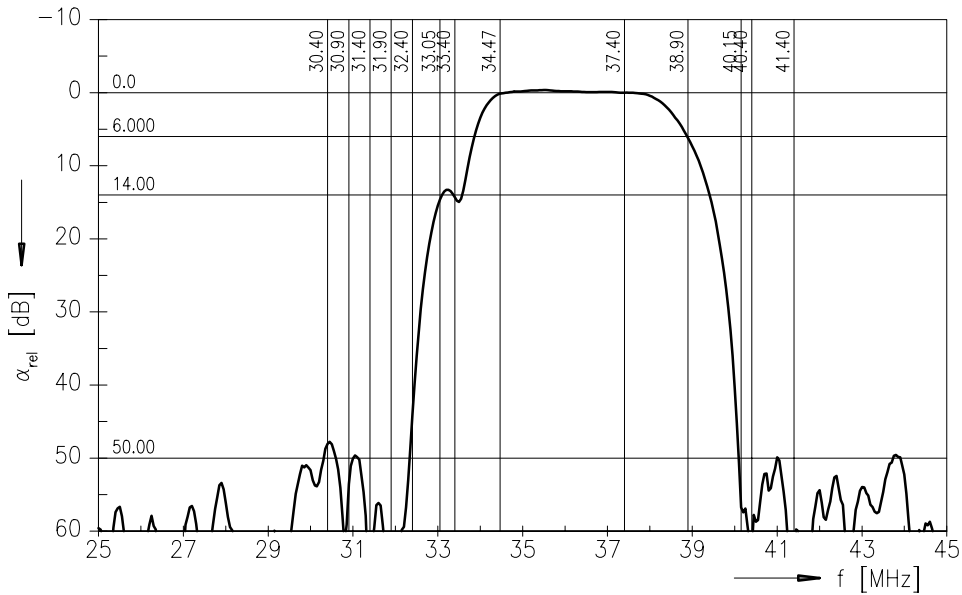
Reference temperature:  $T_A = 25\text{ }^\circ\text{C}$   
 Terminating source impedance:  $Z_S = 50\ \Omega$   
 Terminating load impedance:  $Z_L = 2\ \text{k}\Omega \parallel 3\ \text{pF}$

		min.	typ.	max.	
<b>Insertion attenuation</b>					
	$\alpha$				
Reference level for the following data	37,40 MHz	11,6	13,1	14,6	dB
<b>Relative attenuation</b>					
	$\alpha_{\text{rel}}$				
Picture carrier	38,90 MHz	5,2	6,2	7,2	dB
Color carrier	34,47 MHz	-0,8	0,2	1,2	dB
Sound carrier	33,40 MHz	12,9	14,4	15,9	dB
NICAM sound carrier	33,05 MHz	—	14,5	—	dB
Adjacent picture carrier	30,90 MHz	49,0	56,0	—	dB
	31,40 MHz	50,0	60,0	—	dB
	31,90 MHz	50,0	63,0	—	dB
	32,40 MHz	36,0	43,0	—	dB
	40,15 MHz	44,0	56,0	—	dB
Adjacent sound carrier	40,40 MHz	50,0	60,0	—	dB
	41,40 MHz	47,0	60,0	—	dB
Lower sidelobe	25,00 ... 31,90 MHz	43,0	48,0	—	dB
Upper sidelobe	40,40 ... 45,00 MHz	44,0	50,0	—	dB
<b>Reflected wave signal suppression</b>					
1,2 $\mu\text{s}$ ... 6,0 $\mu\text{s}$ after main pulse (test pulse 250 ns, carrier frequency 37,40 MHz)		42,0	52,0	—	dB
<b>Feedthrough signal suppression</b>					
1,2 $\mu\text{s}$ ... 1,1 $\mu\text{s}$ before main pulse (test pulse 250 ns, carrier frequency 37,40 MHz)		50,0	56,0	—	dB
<b>Group delay predistortion</b>					
(reference frequency 38,90 MHz)					
	$\Delta\tau$				
	36,90 MHz	—	-90	—	ns
	34,47 MHz	—	70	—	ns
<b>Impedance at 37,40 MHz</b>					
	Input: $Z_{\text{IN}} = R_{\text{IN}} \parallel C_{\text{IN}}$	—	1,3 $\parallel$ 18,4	—	k $\Omega$ $\parallel$ pF
	Output: $Z_{\text{OUT}} = R_{\text{OUT}} \parallel C_{\text{OUT}}$	—	1,9 $\parallel$ 4,2	—	k $\Omega$ $\parallel$ pF
<b>Temperature coefficient of frequency</b>					
	$TC_f$	—	-72	—	ppm/K



Data Sheet

Frequency response





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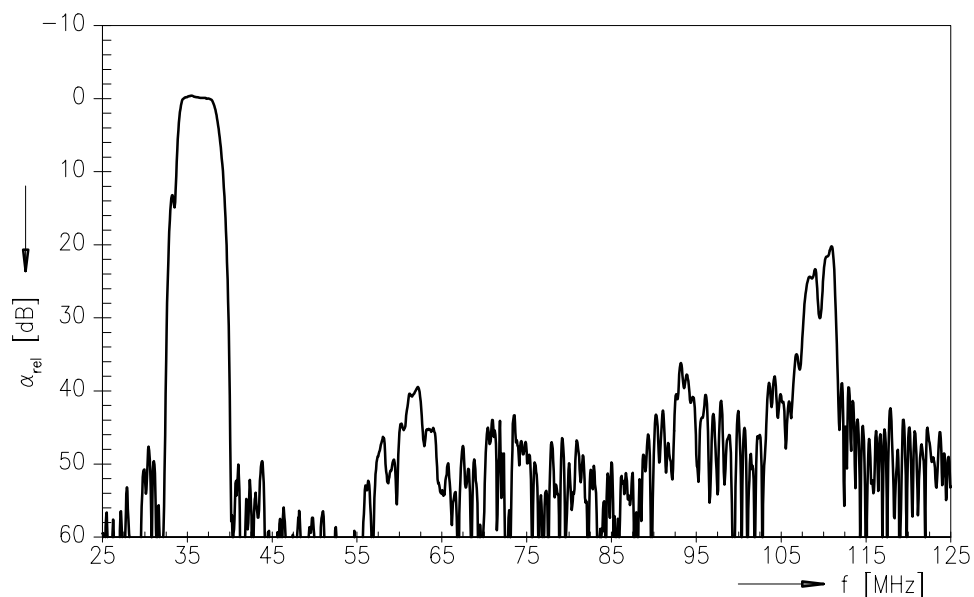
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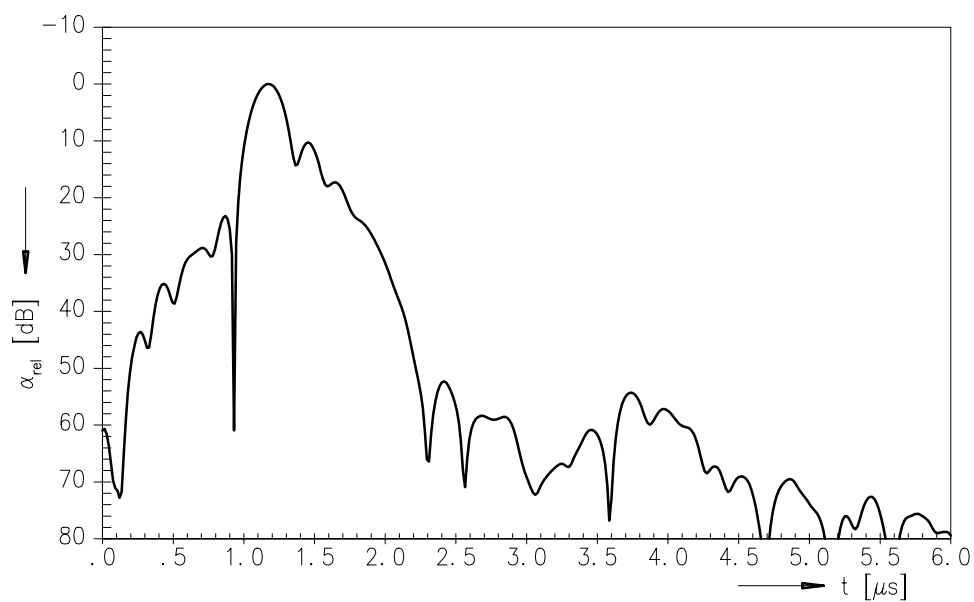
38,90 MHz

Data Sheet

Frequency response



Time domain response





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