



# SAW Components

Data Sheet G 1963 M





**SAW Components**

**G 1963 M**

**IF Filter for Intercarrier Applications**

**38,90 MHz**

**Data Sheet**

**Standard**

Plastic package **SIP5K**

- 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
- Suitable for CENELEC EN 55020

**Terminals**

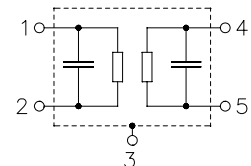
- Tinned CuFe alloy



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
G 1963 M	B39389-G1963-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**

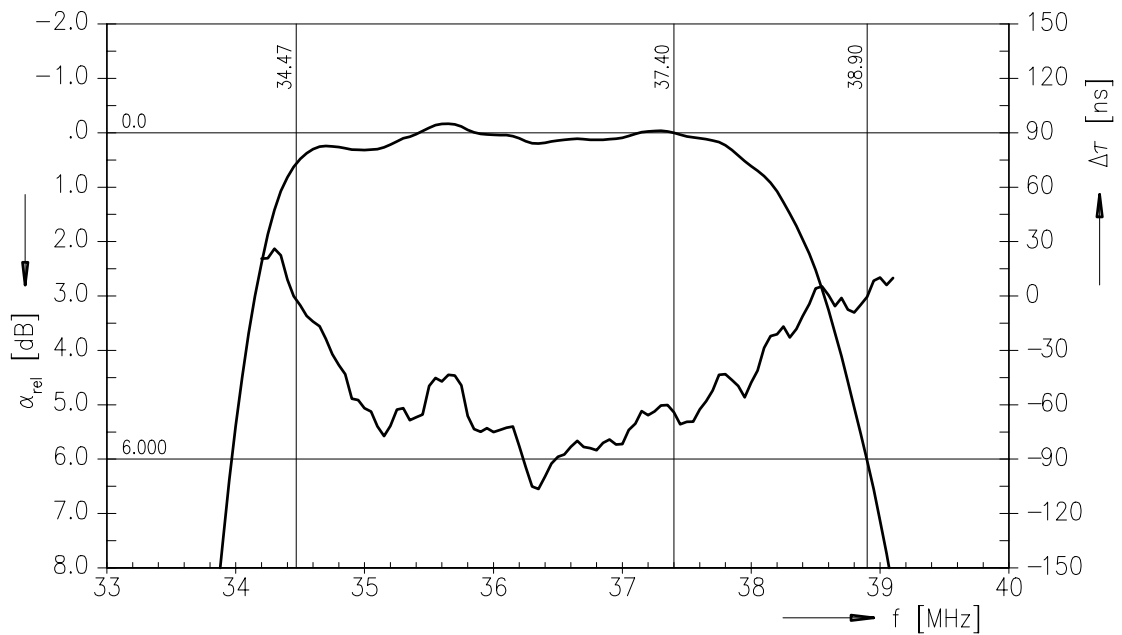
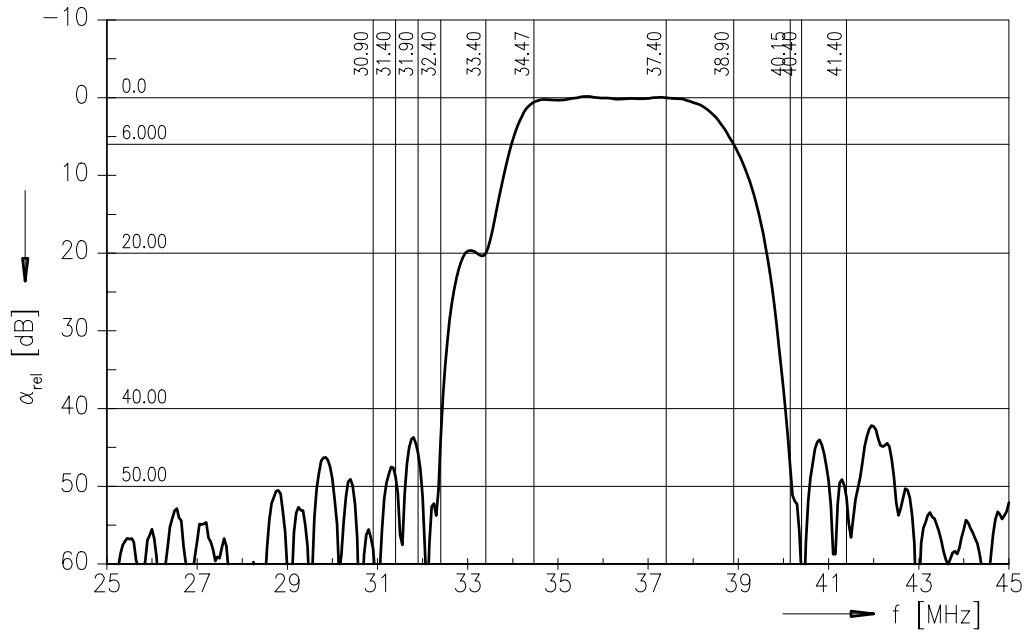
Reference temperature:  $T_A = 25\text{ °C}$   
 Terminating source impedance:  $Z_S = 50\ \Omega$   
 Terminating load impedance:  $Z_L = 2\text{ k}\Omega \parallel 3\text{ pF}$

		min.	typ.	max.	
<b>Insertion attenuation</b>					
	$\alpha$				
Reference level for the following data	37,40 MHz	12,7	14,2	15,7	dB
<b>Relative attenuation</b>					
	$\alpha_{rel}$				
Picture carrier	38,90 MHz	4,9	5,9	6,9	dB
Color carrier	34,47 MHz	-0,4	0,6	1,6	dB
	34,15 MHz	—	3,2	—	dB
Sound carrier	33,40 MHz	19,1	20,1	21,1	dB
Adjacent picture carrier UHF	30,90 MHz	44,0	55,0	—	dB
VHF	31,90 MHz	42,0	46,0	—	dB
	32,40 MHz	42,0	46,0	—	dB
	40,15 MHz	42,0	50,0	—	dB
Adjacent sound carrier VHF	40,40 MHz	45,0	53,0	—	dB
UHF	41,40 MHz	42,0	49,0	—	dB
Lower sidelobe	25,00 ... 32,40 MHz	41,0	45,0	—	dB
Upper sidelobe	40,40 ... 45,00 MHz	36,0	40,0	—	dB
<b>Reflected wave signal suppression</b>					
1,1 $\mu$ s ... 6,0 $\mu$ s after main pulse (test pulse 250 ns, carrier frequency 37,40 MHz)		44,0	50,0	—	dB
<b>Feedthrough signal suppression</b>					
1,2 $\mu$ s ... 1,1 $\mu$ 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)					
	$\Delta\tau$				
	37,00 MHz	—	-85	—	ns
	34,47 MHz	—	0	—	ns
<b>Impedance at 37,40 MHz</b>					
Input:	$Z_{IN} = R_{IN} \parallel C_{IN}$	—	1,8 $\parallel$ 14,8	—	k $\Omega$ $\parallel$ pF
Output:	$Z_{OUT} = R_{OUT} \parallel C_{OUT}$	—	1,6 $\parallel$ 5,3	—	k $\Omega$ $\parallel$ pF
<b>Temperature coefficient of frequency</b>					
	$TC_f$	—	-72	—	ppm/K



Data Sheet

Frequency response





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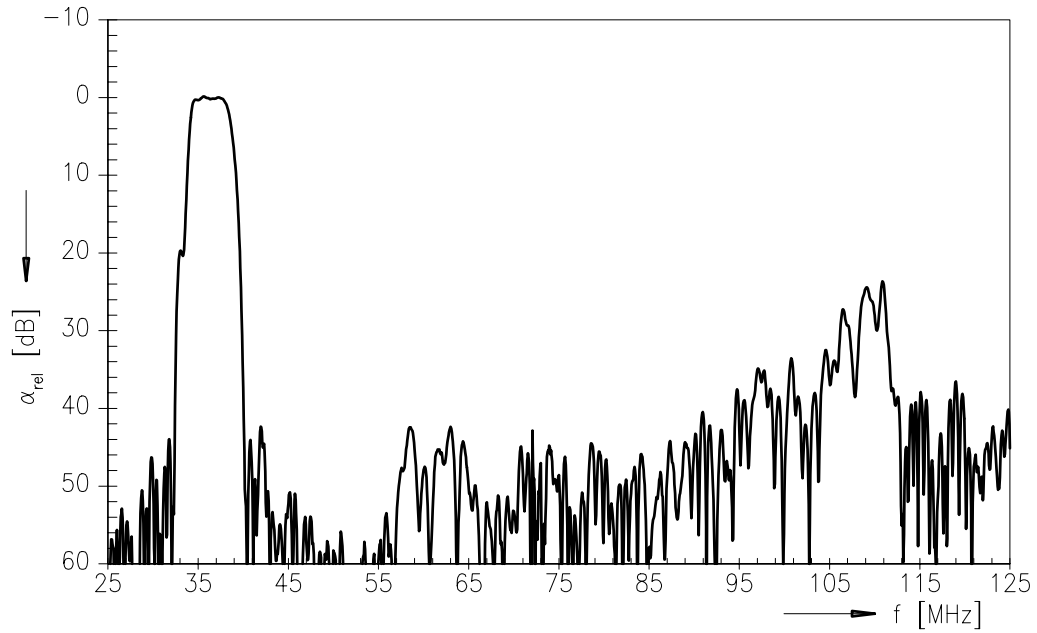
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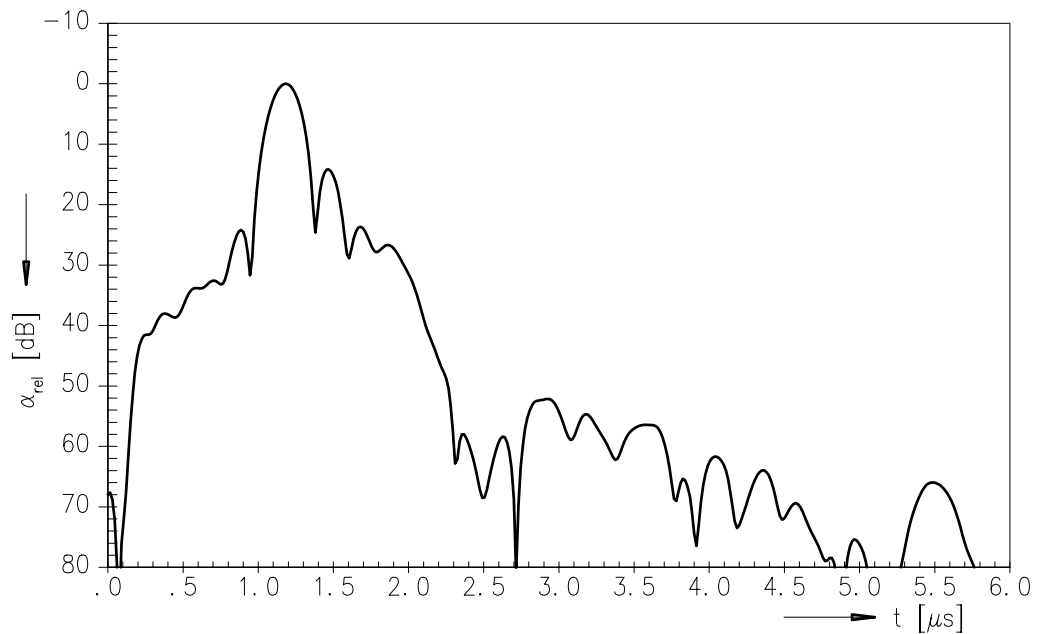
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Frequency response



Time domain response





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