



SAW Components

Data Sheet G 1963 M





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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

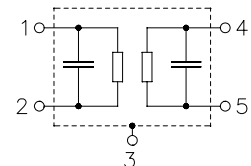
- Tinned CuFe alloy



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:

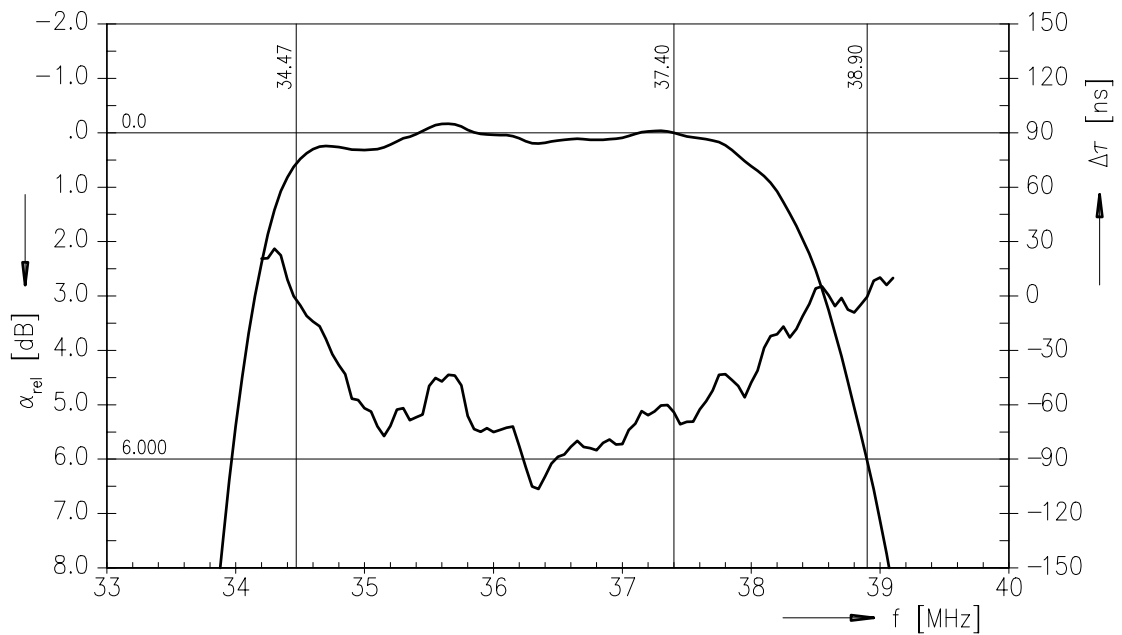
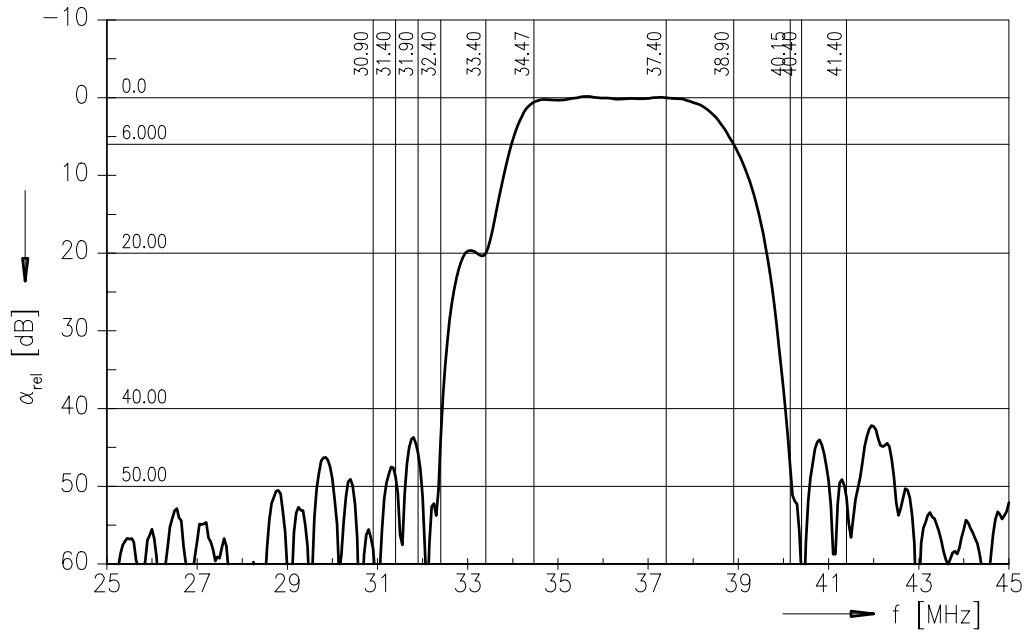
$Z_L = 2\text{ k}\Omega \parallel 3\text{ pF}$

		min.	typ.	max.	
Insertion attenuation					
	α				
Reference level for the following data	37,40 MHz	12,7	14,2	15,7	dB
Relative attenuation					
	α_{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
Reflected wave signal suppression					
1,1 μ s ... 6,0 μ s after main pulse (test pulse 250 ns, carrier frequency 37,40 MHz)		44,0	50,0	—	dB
Feedthrough signal suppression					
1,2 μ s ... 1,1 μ s before main pulse (test pulse 250 ns, carrier frequency 37,40 MHz)		50,0	56,0	—	dB
Group delay predistortion					
(reference frequency 38,90 MHz)					
	$\Delta\tau$				
	37,00 MHz	—	-85	—	ns
	34,47 MHz	—	0	—	ns
Impedance at 37,40 MHz					
Input:	$Z_{IN} = R_{IN} \parallel C_{IN}$	—	1,8 \parallel 14,8	—	k Ω \parallel pF
Output:	$Z_{OUT} = R_{OUT} \parallel C_{OUT}$	—	1,6 \parallel 5,3	—	k Ω \parallel pF
Temperature coefficient of frequency					
	TC_f	—	-72	—	ppm/K



Data Sheet

Frequency response





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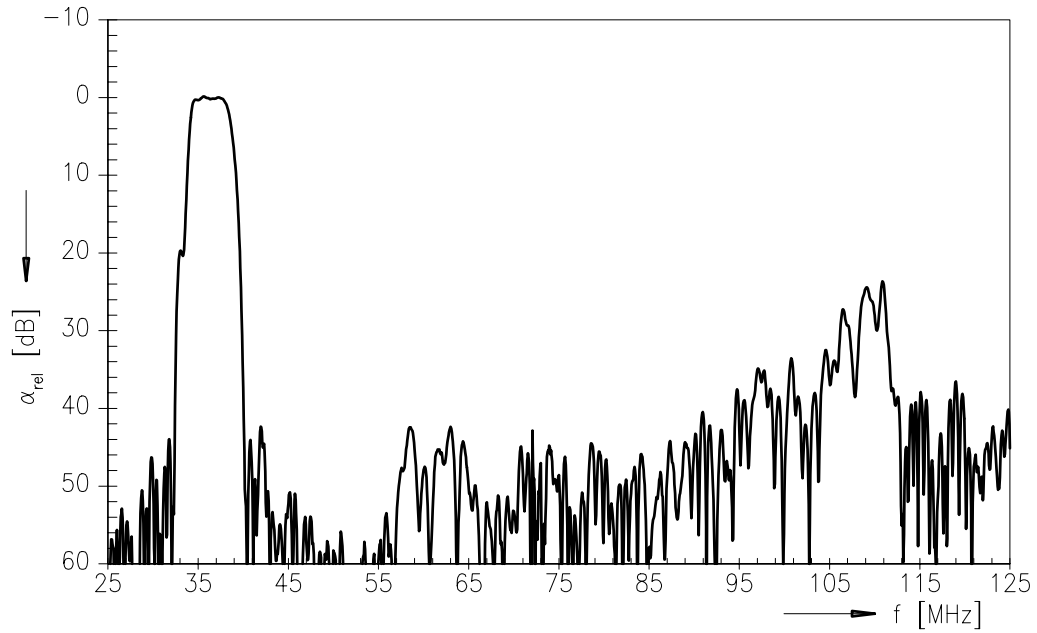
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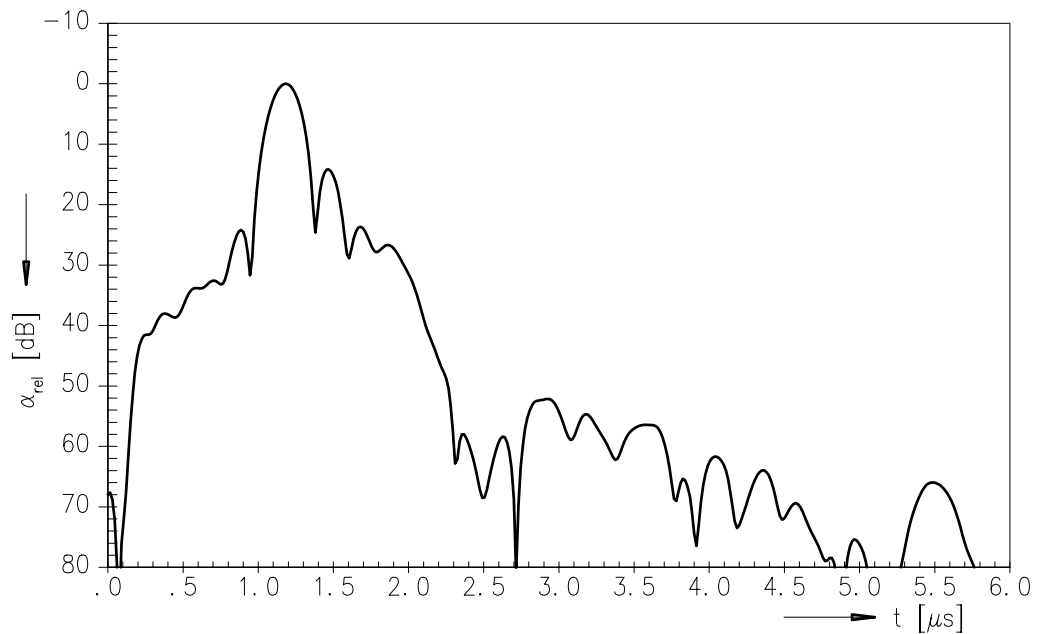
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Frequency response



Time domain response





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