



# SAW Components

Data Sheet G 3963 M





**SAW Components**

**G 3963 M**

**IF Filter for Video Applications**

**38,90 MHz**

**Data Sheet**

**Standard**

Plastic package **SIP5K**

- B/G

**Features**

- TV IF filter with Nyquist slope and sound suppression
- Constant group delay
- Suitable for CENELEC EN 55020

**Terminals**

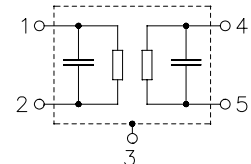
- Tinned CuFe alloy



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 3963 M	B39389-G3963-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**

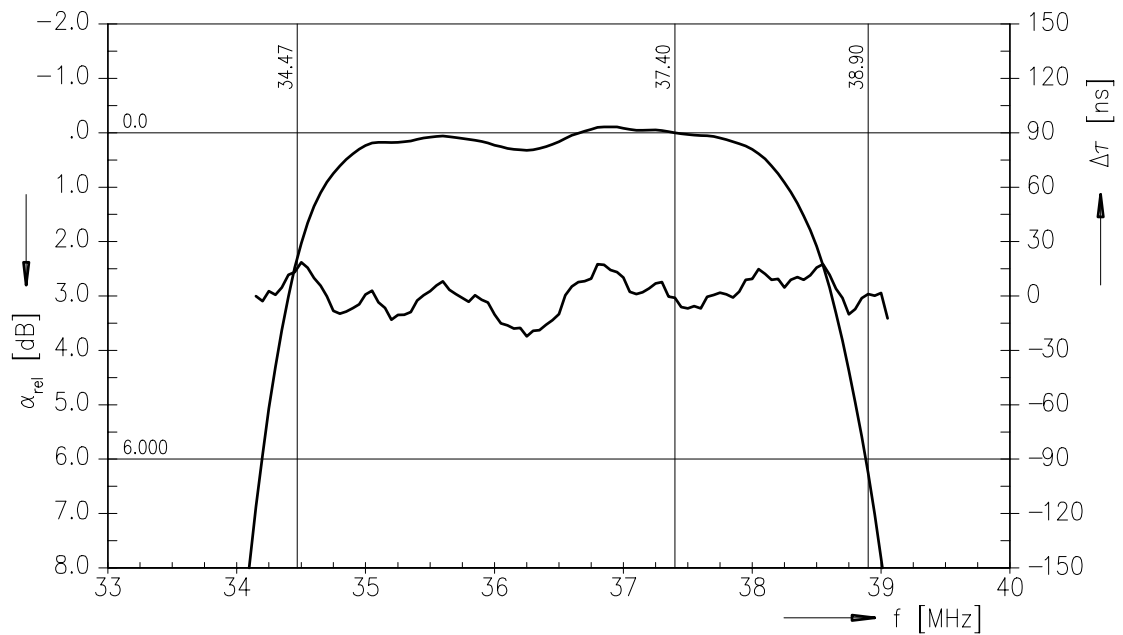
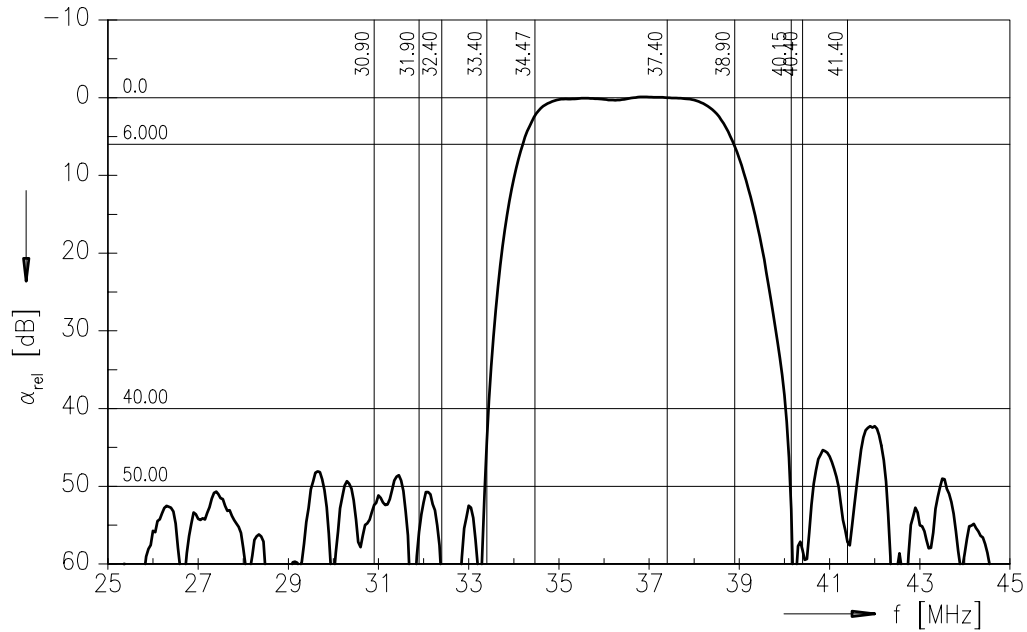
Reference temperature:  $T_A = 25\text{ °C}$   
 Terminating source impedance:  $Z_S = 50\ \Omega$   
 Terminating load impedance:  $Z_L = 2\text{ k}\Omega \parallel 3\text{ pF}$

		min.	typ.	max.	
<b>Insertion attenuation</b>					
	$\alpha$				
Reference level for the following data	37,40 MHz	13,0	14,5	16,0	dB
<b>Relative attenuation</b>					
	$\alpha_{rel}$				
Picture carrier	38,90 MHz	4,6	5,6	6,6	dB
Color carrier	34,47 MHz	1,7	2,7	3,7	dB
Sound carrier	33,40 MHz	42,0	56,0	—	dB
	32,40 MHz	46,0	56,0	—	dB
Adjacent picture carrier	UHF 30,90 MHz	46,0	58,0	—	dB
	VHF 31,90 MHz	46,0	57,0	—	dB
	40,15 MHz	38,0	45,0	—	dB
Adjacent sound carrier	VHF 40,40 MHz	45,0	55,0	—	dB
	UHF 41,40 MHz	44,0	51,0	—	dB
Lower sidelobe	25,00 ... 31,90 MHz	42,0	47,0	—	dB
Upper sidelobe	40,40 ... 45,00 MHz	38,0	43,0	—	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	54,0	—	dB
<b>Feedthrough signal suppression</b>					
1,2 $\mu$ s ... 1,05 $\mu$ s before main pulse (test pulse 250 ns, carrier frequency 37,40 MHz)		50,0	56,0	—	dB
<b>Group delay ripple (p-p)</b>	$\Delta\tau$	—	50	—	ns
<b>Impedance at 37,40 MHz</b>					
Input: $Z_{IN} = R_{IN} \parallel C_{IN}$		—	1,7 $\parallel$ 14,1	—	k $\Omega$ $\parallel$ pF
Output: $Z_{OUT} = R_{OUT} \parallel C_{OUT}$		—	1,3 $\parallel$ 5,5	—	k $\Omega$ $\parallel$ pF
<b>Temperature coefficient of frequency</b>	$TC_f$	—	-72	—	ppm/K



Data Sheet

Frequency response





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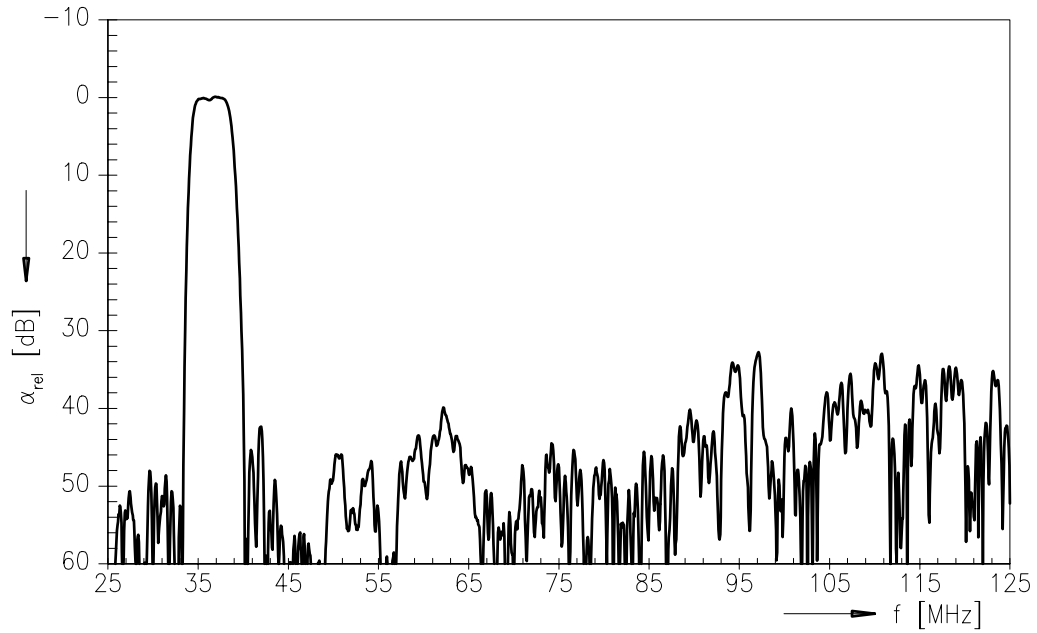
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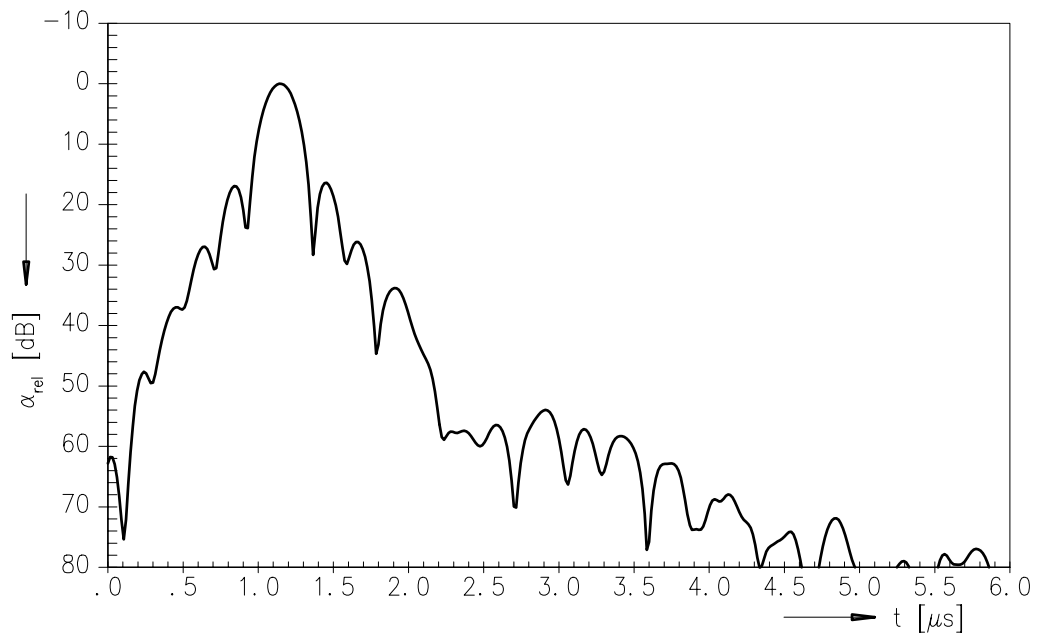
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Data Sheet

### Frequency response



### Time domain response





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