



Siemens Matsushita Components

SAW Components IF Filter for Intercarrier Applications

G 1872 M
38,90 MHz

Data Sheet

Standard

- B/G

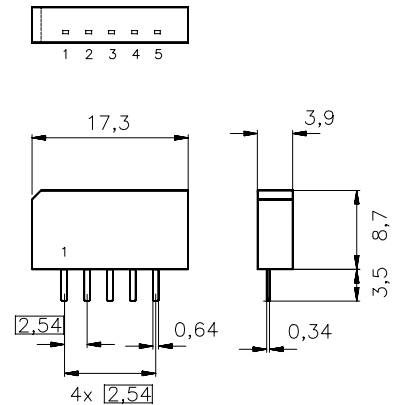
Features

- TV IF filter with Nyquist slope and sound shelf
- Reduced group delay predistortion as compared with standard B/G, half

Terminals

- Tinned CuFe alloy

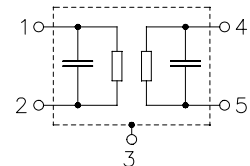
Plastic package **SIP5K**



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 1872 M	B39389-G1872-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: $T_A = 25\text{ }^\circ\text{C}$
 Terminating source impedance: $Z_S = 50\ \Omega$
 Terminating load impedance: $Z_L = 2\ \text{k}\Omega \parallel 3\ \text{pF}$

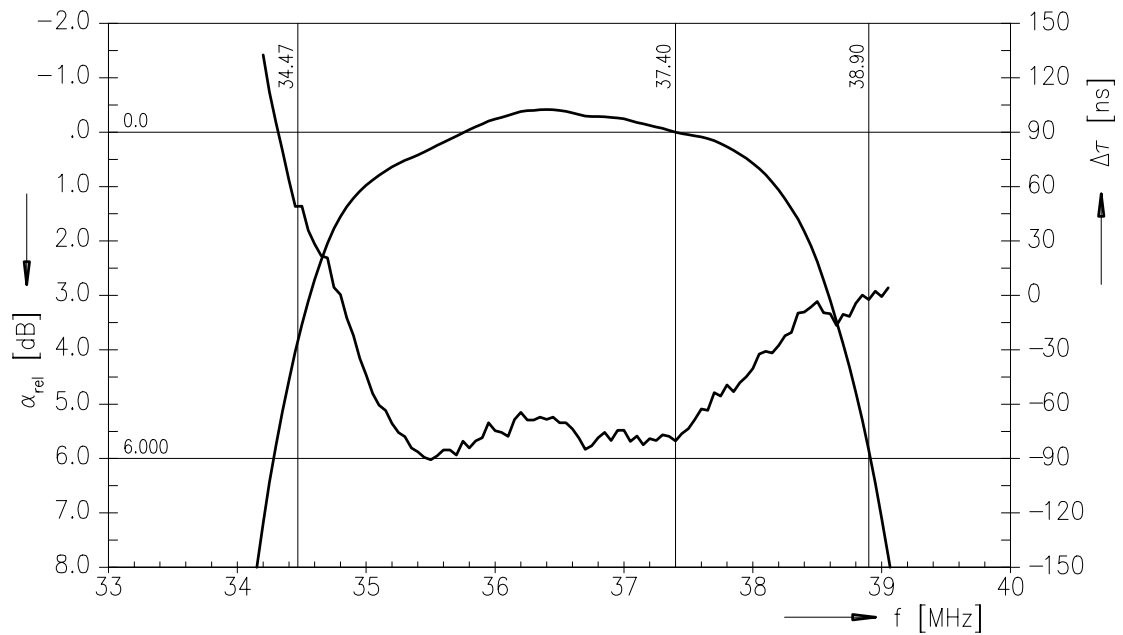
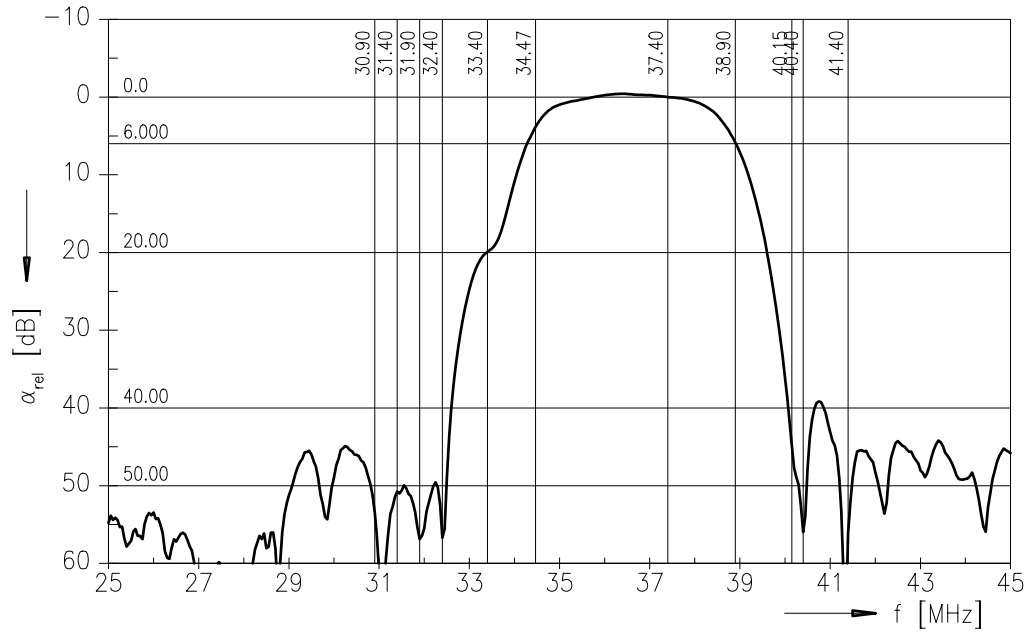
		min.	typ.	max.	
Insertion attenuation					
	α				
Reference level for the following data	37,40 MHz	13,9	15,4	16,9	dB
Relative attenuation					
	α_{rel}				
Picture carrier	38,90 MHz	4,5	5,5	6,5	dB
Color carrier	34,47 MHz	2,9	3,9	4,9	dB
Sound carrier	33,40 MHz	18,8	20,0	21,2	dB
Adjacent picture carrier UHF	30,90 MHz	46,0	58,0	—	dB
VHF	31,90 MHz	46,0	60,0	—	dB
	31,40 MHz	44,0	54,0	—	dB
	32,40 MHz	42,0	54,0	—	dB
	40,15 MHz	33,0	43,0	—	dB
Adjacent sound carrier VHF	40,40 MHz	37,0	43,0	—	dB
UHF	41,40 MHz	40,0	52,0	—	dB
Lower sidelobe	25,00 ... 31,90 MHz	38,0	43,0	—	dB
Upper sidelobe	40,40 ... 45,00 MHz	34,0	39,0	—	dB
Reflected wave signal suppression					
1,0 μs ... 6,0 μs after main pulse (test pulse 250 ns, carrier frequency 37,40 MHz)		40,0	50,0	—	dB
Feedthrough signal suppression					
0,8 μs ... 0,6 μs 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	—	-100	—	ns
	34,47 MHz	—	65	—	ns
Impedance at 37,40 MHz					
Input:	$Z_{\text{IN}} = R_{\text{IN}} \parallel C_{\text{IN}}$	—	2,4 \parallel 8,8	—	k Ω \parallel pF
Output:	$Z_{\text{OUT}} = R_{\text{OUT}} \parallel C_{\text{OUT}}$	—	2,6 \parallel 3,4	—	k Ω \parallel pF
Temperature coefficient of frequency					
	TC_f	—	-72	—	ppm/K



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Data Sheet Frequency response



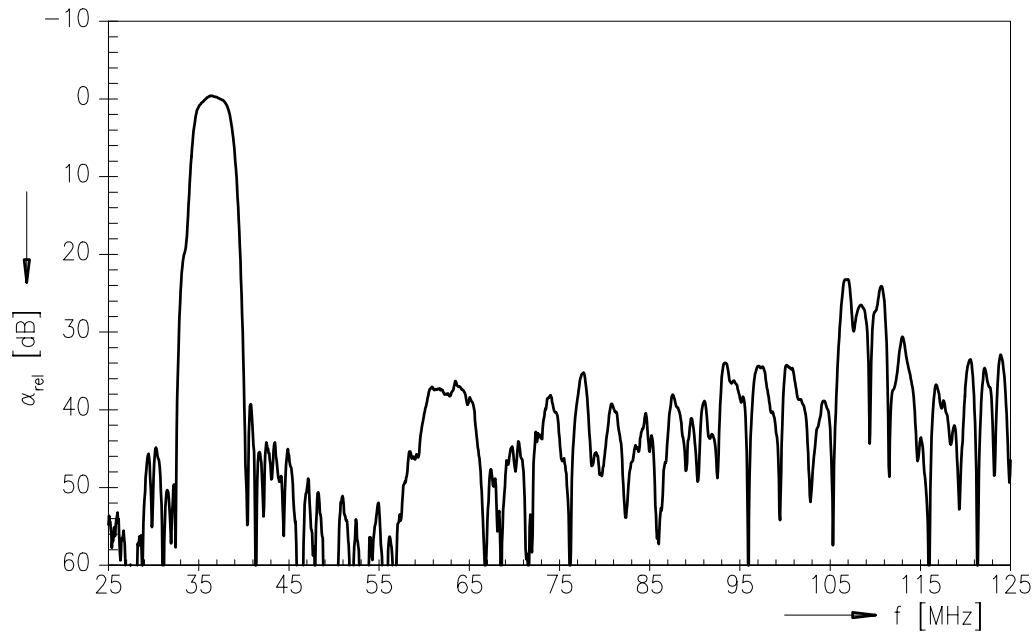


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Frequency response



Time domain response

